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Decision 99-05-030 May 13, 1999

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (SDG&E) for Authority to Implement a Distribution Performance-Based Ratemaking Mechanism (U 902-M).	Application 98-01-014 (Filed January 16, 1998)

(See Appendix A for list of appearances.)

OPINION REGARDING SAN DIEGO GAS & ELECTRIC COMPANY'S DISTRIBUTION PERFORMANCE-BASED RATEMAKING MECHANISM

Summary

In this decision, we consider the performance indicators and the design of the San Diego Gas & Electric Company (SDG&E) distribution performance-based ratemaking (PBR) mechanism. We adopt the settlement agreement regarding the performance indicators proposed by SDG&E, the Office of Ratepayer Advocates (ORA), the Utility Consumers' Action Network (UCAN), the Federal Executive Agencies (FEA), the Coalition of California Utility Employees (CCUE), the City of San Diego, the California Farm Bureau Federation (Farm Bureau), and the Natural Resources Defense Council (NRDC). This agreement is an all-party settlement and resolves all issues raised in connection with the requested performance indicators.

We adopt a distribution PBR mechanism modeled after those adopted for Southern California Gas Company (SoCalGas) in Decision (D.) 97-07-054 and Southern California Edison (Edison) in D.96-09-092. We adopt a rate indexing mechanism, a progressive sharing mechanism, and a productivity factor that includes a stretch factor. The revenue requirement used as the starting point for this distribution PBR mechanism is $563.4 million for electric distribution and $201.5 million for gas base rate revenues, as approved in D.98-12-038.[1]

[1] Including expected Demand-side Management (DSM) shareholder incentives and compared to revenues at present rates, D.98-12-038 adopts a decrease of $14.2 million in the electric department (2.46% decrease as a system average rate change) and an increase of $3.9 million for the gas department (1.97% increase on a system average basis). The effect for combined departments is a $10.3 million decrease, (1.33% decrease on a system average basis).

Procedural History

In D.97-04-067, we ordered SDG&E to file an application requesting approval of a distribution PBR mechanism. On January 6, 1998, SDG&E filed Application (A.) 98-01-014 to request authority to establish such a mechanism. ORA and UCAN filed timely protests, to which SDG&E filed a reply. SDG&E, ORA, and UCAN (jointly for UCAN, NRDC, Enron, FEA, and City of San Diego) filed prehearing conference statements.

On January 1, 1998, Senate Bill 960 became effective, which established various procedures for our proceedings. These rules are delineated in Public Utilities (PU) Code §§ 1701 et seq. and Article 2.5 of our Rules of Practice and Procedure. In accordance with the SB 960 rules, this proceeding has been categorized as ratesetting (ALJ 176-2986, as noticed in the Daily Calendar of February 6, 1998).

On March 17, 1998, Assigned Commissioner Neeper and Assigned Administrative Law Judge (ALJ) Minkin presided at a prehearing conference. Commissioner Neeper then issued a scoping memo which designated ALJ Minkin as the principal hearing officer for this proceeding. The scoping memo set forth the issues to be included in this proceeding and established a procedural schedule under which the Commission would issue a final decision in this proceeding by March 1999, or in no event no later than 18 months from the date of filing of the application, pursuant to SB 960, Section 13. Commissioner Neeper also encouraged parties to meet and confer on an informal basis to attempt to resolve issues.

At the request of parties, the scoping memo was amended to revise the procedural schedule to delay hearings and set a second prehearing conference on August 10, 1998. ORA,UCAN, FEA, CCUE, and NRDC submitted testimony on SDG&E's proposal on July 3, 1998. SDG&E and CCUE submitted rebuttal

testimony on July 31. Informal discussions among the parties led to two technical workshops held in San Francisco on August 20 and 27. A formal settlement conference was noticed on September 2, in conformance with Rule 51, and held on September 14. The settling parties filed and served the Joint Motion for Adoption of Settlement Agreement on PBR Performance Indicators on September 15, 1998. No party filed comments.[2] No evidentiary hearings were held on the issues addressed in the proposed settlement agreement.

PBR design issues were addressed in four days of evidentiary hearings held on September 2, 3, 4, and 14. Commissioner Neeper was in attendance for closing arguments on September 16. Public participation hearings were held in San Diego and Escondido on September 23 and September 24, respectively, at which Commissioner Neeper and ALJ Minkin presided. This proceeding was submitted upon opening and reply briefs, filed on October 9 and October 23, respectively.[3]

Framework for Incentive-Based Ratemaking

We have long considered incentive-based ratemaking superior to command-and-control regulation. PBR mechanisms send the important message that minimizing costs without sacrificing service quality and reliability can result in greater rewards with "less" regulation than traditional cost-of-service regulation. In order to provide these incentives, we must necessarily break the

[2] The settling parties also requested that the Commission shorten the time for opening comments and reply comments on the proposed settlement agreement. There was no reason to shorten time, but given the all-party nature of the settlement, no comments were filed. Thus, this request is moot.

[3] By separate motions filed on October 26, UCAN requests leave to file a corrected opening brief and to file its reply brief late. Good cause being shown, these motions are granted.

link between rates and costs. Cost-of-service regulation uses the utility's own costs in setting rates and often results in inefficiency, because utilities are rewarded by increased rates for increased costs.

We have established several goals to be addressed by incentive regulation for energy utilities. In our comprehensive rulemaking (R.94-04-031) and investigation (I.94-04-032) addressing proposed policies on electric restructuring and reforming regulation, we stated our intention to replace cost-of-service regulation with performance-based regulation. It is worth reviewing the goals stated in that document:

> "First, prices for electric services in California are simply too high. The shift to performance-based regulation can provide considerably stronger incentives for efficient utility operations and investment, lower rates, and result in more reasonable, competitive prices for California's consumers. Performance-based regulation also promises to simplify regulation and reduce administrative burdens in the long term. Second, since the utilities' performance-based proposals currently before us leave both industry structure and the utility franchise fundamentally intact, consumers can expect service, safety and reliability to remain at their historically high levels. Third, the utilities' reform proposals are likely to provide an opportunity to earn that is at a minimum comparable to opportunities present in cost-of-service regulation. Finally, performance-based regulation can assist the utilities in developing the tools necessary to make the successful transition from an operating environment directed by government and focussed on regulatory proceedings, to one in which consumer, the rules of competition, and market forces dictate." [all footnotes omitted.] (R.94-04-031/I.94-04-032, mimeo. at pp. 35-36.)

In D.94-08-023, we adopted an experimental base rate PBR mechanism for SDG&E and stated our goals and objectives for improving regulation:

> "1. To provide greater incentive than exists under current regulation for the utility to reduce rates.

"2. To provide a more rational system of incentives for management to take reasonable risks and control costs in both the long and short run. This includes extending the relatively short-term planning horizon associated with the three-year GRC cycle and reducing the company's incentive to add to rate base to increase earnings.

"3. To prepare the company to operate effectively in the increasingly competitive energy utility industry. This entails providing greater flexibility for management to take risks combined with a greater assignment of the consequences of those risks to the company.

"4. To reduce the administrative cost of regulation.

"Again, it is not sufficient to define these objectives for a regulatory reform experiment. We must also ensure that the achievement of regulatory reform does not come at the expense of the primary purpose or other relevant objectives of regulation. We reiterate the standards for review … which the parties generally purport to embrace. The experiment must have a reasonable potential for improving on existing regulation without jeopardizing regulatory goals, and therefore, (1) respond to the goal of safe, reliable, environmentally sensitive service at reasonable rates; (2) be designed to enable the Commisison to judge the success of the experiment when it is over; and (3) not in itself create unreasonable risks. … we accept and adopt the following additional criteria:

"1. To the extent that an individual program component or the proposal as a whole imposes greater risks on ratepayers, it should also remove, reduce, provide compensation for, or transfer those risks to the utility. This does not necessarily mean …that we need to require rate reductions in return for ratepayer assumption of risk, notwithstanding our objective of rate reduction. It does mean that the program, taken as a whole, should provide a reasonable balancing of the attendant risks and rewards. There should be an equitable sharing of the benefits that reform is intended to achieve.

"2. The adopted regulatory program should maintain system quality, reliability, safety, and customer satisfaction even as

expected cost reductions occur. Thus, it should … prevent or discourage long-run disinvestment in the system that could otherwise result in unintended system degradation.

"3. The program should avoid or minimize unintended consequences in interplay among various regulatory programs, including DSM incentive, low income rate assistance programs, etc.

"4. The experimental program should be flexible enough to allow needed changes during its term, yet sufficiently fixed in form and content to provide a predictable framework for management planning and to allow evaluation.

"5. There should be explicit provisions for a program of monitoring and evaluation which will enable us to become aware of problems requiring solution during the term of the experiment and which will provide information needed to decide on the program of regulation which will be implemented at the conclusion of the experiment." (55 CPUC 2d 592, 615-616.)

Our Preferred Policy Decision (D.95-12-063, as modified by D.96-01-009) in the electric restructuring rulemaking and investigation reiterated these goals and directed California's three major investor-owned utilities, including SDG&E, to file applications to establish separate generation and distribution PBRs:

"Our goal is to have an improved regulatory process that offers flexibility and encourages utilities to focus on their performance, reduce operation cost, increase service quality, and improve productivity. At the same time, we must ensure that safety, quality of service, and reliability are not compromised. There is broad but not universal consensus that Performance Based Ratemaking (PBR) can accomplish these objectives by providing clear signals to utility managers with respect to their business decisions and helping them make the transition from a tightly regulated structure to one that is more competitive. Under PBR, utility performance is measured against established benchmarks. Superior performance, above the benchmark, would receive financial rewards, and poor performance would result in financial penalties to the shareholders. By providing

> financial incentives to utilities, we will encourage them to operate more efficiently to maximize their profits." (Preferred Policy Decision, mimeo. at p. 82.)

In both D.96-09-092 (adopting a PBR mechanism Edison) and D.97-07-054 (adopting a PBR mechanism for SoCalGas), we confirmed our goals for developing PBR mechanisms:

- ?? Improving the efficiency and performance of the utility;
- ?? Improving incentives and removing disincentives for utility cost reductions;
- ?? Simplifying and streamlining the regulatory process;
- ?? Moving rates for all customer classes, in real dollars, steadily down the national average for investor-owned utilities;
- ?? Maintaining a reasonable opportunity for the utility to earn a fair rate of return; and
- ?? Maintaining and improving quality of service.

Taken together, these established goals help us to develop the framework for considering SDG&E's distribution PBR proposal.

Background

SDG&E has been operating under a base rate PBR mechanism since 1994. Edison operates under a distribution PBR mechanism, as described in D.96-09-092, D.98-07-077, and D.98-08-015. SoCalGas also operates under a PBR mechanism, as described in D.97-07-054. As approved in D.98-03-073, SoCalGas and SDG&E are now operating entities within the holding company of Sempra Energy, Inc., as a result of the merger of Enova Corporation and Pacific Enterprises, the parent companies of SDG&E and SoCalGas, respectively. We will briefly review the design of each of these mechanisms.

The process of developing an effective PBR mechanism begins with selecting an appropriate starting point for revenue requirements. In this proceeding, we have approved a settlement for this amount, as discussed in D.98-12-038. Revenue requirements or rates are then adjusted annually to account for inflation and productivity, using indexing methods. Taken together, inflation with the productivity offset is commonly described as "Consumer Price Index (CPI) minus X" or the "update rule." Incentives are then developed to ensure that utility decision-makers are motivated to achieve cost savings.

Earnings sharing mechanisms track actual earnings and share with ratepayers any earnings or losses that fall above or below a certain threshold. Generally, earnings sharing mechanisms have *deadbands* in which there is no sharing; i.e., ranges in which only shareholders are at risk for the earnings variations. A live band is the range of an applicable PBR performance indicator against which the compared utility performance may result in varying rewards or penalties. Adopting an effective PBR mechanism requires a balance between providing appropriate incentives to utilities with adhering to our stated goals of providing an equitable sharing of the benefits. In addition, our objective of encouraging the utilities to operate more effectively in a competitive marketplace suggest that these benefits must be shared with ratepayers.

Earnings sharing mechanisms may be either progressive or regressive. A *regressive* mechanism is one in which the utility's share decreases as cost savings increase. In contrast, a *progressive* mechanism is one in which the utility's share increases as cost savings increase. Finally, "*Z" factors* apply to exogenous or unforeseen events that are beyond the utility's control and that have a material impact on the utility's costs. In D.94-06-011, we adopted nine criteria for determining whether the cost impact from these unexpected events should be

included in the utility's revenue requirements. In sum, the formula describing PBR regulation is as follows:

$R_n = (r *(esc -X)) + Z$

where:

R = rates or revenue requirements in years following initial period

n = year for which rates or revenue requirements are determined

r = starting point rates or revenue requirements

esc = escalation or inflation measure

X = productivity measure

Z = any one-time unforeseen costs that must be accounted for

In addition, each PBR mechanism has various performance indicators. These performance indicators are designed to ensure that the utility's service quality, customer service, reliability, and safety do not deteriorate under PBR regulation. The utility's performance is reviewed according to certain criteria and either earns a reward or suffers a penalty. These rewards and penalties are in addition to any earnings or losses achieved under the earnings sharing component of the mechanism.

SDG&E's Base Rate PBR Mechanism

SDG&E's initial PBR mechanism was adopted on September 1, 1994 and applied to the period 1994 through 1998. This base rate PBR mechanism required a sales forecast and the 1993 GRC revenue requirements were adopted as the starting point for this mechanism, as escalated to 1994 using specific PBR formulas for operation and maintenance (O&M) costs and net plant additions. Different inflation components were applied to labor O&M costs (the SDG&E labor escalation factor), non-labor O&M costs (the DRI national inflation index), and plant additions (the Handy Whitman inflation index). The productivity component was fixed at 1.5% and was applied only in O&M formulas. A

customer growth factor was incorporated in both O&M inflation factors and the plant additions inflation factor.

There is no earnings sharing up to 100 basis points[4] above the authorized rate of return. The 100 basis points consist of a deadband. From 100 to 150 basis points above the authorized rate of return, a regressive sharing mechanism was adopted in which 75% accrues to shareholders and 25% accrues to ratepayers. From 150 basis points above authorized rate of return, sharing is 50/50. There is no downside risk to ratepayers. No specific Z-factor treatment was adopted, but parties had the ability to file petitions for modification. No specific exclusions were accounted for, but SDG&E could apply to request exclusion of certain material external events above $500,000. A midterm review was required, with reports on annual performance and annual escalation updates. Offramps to the PBR mechanism were built in at 150 basis points below the authorized rate of return and 300 basis points above and below the authorized rate of return.

During the period 1994 through 1997, SDG&E has earned approximately $136 million in after-tax dollars from its earnings sharing mechanism. In 1994, SDG&E earned 94 basis points above its authorized rate of return, which is within the deadband. In 1995, SDG&E earned 130 basis points above the authorized rate of return, which is 30 basis points above the deadband area. In 1996, SDG&E earned 152 basis points above its authorized rate of return, or 52 basis points above the deadband. In 1997, SDG&E earned 153 basis points

[4] A basis point is 1/100th of 1%; i.e., 100 basis points equals 1%.

above its authorized rate of return, or 53 basis points above the deadband.[5] SDG&E also accrued net performance rewards of approximately $18.7 million through 1997. As adjusted by Resolution E-3512, ratepayers' share of earnings above authorized rate of return equaled $6.8 million through 1996. Ratepayers' share in 1997 is expected to equal approximately $4.4 million for a total of $11.2 million over the four-year period.

Edison's Distribution PBR Mechanism

Edison's initial PBR mechanism was adopted in D.96-09-092, to be effective for the period 1997 through 2001. This electric distribution base rate PBR mechanism does not require a sales forecast and the 1996 GRC revenue requirements, as separated transmission and distribution components, were adopted as the starting point for this mechanism, as escalated to 1997 using the "CPI - X" formula applied to rates. The inflation component consists of the Consumer Price Index. The productivity component ramps up from 1.2% in 1997 to 1.4% in 1998 and 1.6% in 1999, 2000, and 2001. No customer growth factor is incorporated.

There is no earnings sharing up to 50 basis points (.5%) above the authorized return on equity. The 50 basis points equal the deadband. This is a progressive sharing mechanism, with ratepayers earning a range of 75% to 0 as the return on equity increases from 50 basis points to 300 basis points above the authorized return on equity. Similarly, shareholders earn a range of 25% to 100%

[5] Final 1997 earnings above authorized rate of return and corresponding shares have not yet been authorized by the Commission. In Resolution E-3562, dated December 17, 1998, the Commission ordered SDG&E to recalculate its revenue sharing amounts for 1994 to 1997, excluding the expenses for various employee and senior management incentive rewards.

over the same range. Ratepayers share in the downside risk in the same percentage. The Commission adopted specific Z-factor criteria for Edison, as previously approved for telephone utilities, with a $10 million deductible. Generation, special one-time amortization accounts, hazardous waste, research, design and development, demand-side management, and low-emission vehicle expenditures were all excluded from this PBR mechanism. A midterm review is required in 1999, with reports on annual performance and annual escalation updates. The PBR mechanism will trigger an offramp at 600 basis points above or below the benchmark return on equity.

In 1997, Edison's actual return on equity was 13.62%, 202 basis points above the authorized return on equity. Ratepayers earned approximately $42.6 million from this sharing mechanism, with shareholders earning about $36.3 million.[6] Edison also accrued a $5 million reward for its health and safety performance indicators.

SoCalGas' PBR Mechanism

SoCalGas' PBR mechanism was adopted in D.97-07-054, to be effective for the period 1998 through 2002. This base rate revenue requirement PBR mechanism requires a sales forecast and the 1997 revenue requirements were adopted as the starting point for this mechanism, as escalated to 1998 using the "CPI - X" formula applied to revenue requirement per customer. The inflation component consists of a weighting of the DRI inflation factors for labor O&M, non-labor O&M, and capital additions. This weighting is based on the three California gas utilities. Then overall productivity component ramps up from 2.1% in 1998 to 2.5% in 2002. The productivity factor includes a stretch

[6] These results have not yet been approved by the Commission.

factor and takes into account declining rate base. The SoCalGas PBR incorporates customer growth in a revenue requirement per customer adjustment.

There is no earnings sharing up to 25 basis points (.25%) above the authorized rate of return. The 25 basis points equals the deadband. The SoCalGas PBR includes a progressive sharing mechanism, with ratepayers earning a range of 75% to 0 as the rate of return increases from 25 basis points to 300 basis points above the authorized return. Similarly, shareholders earn a range of 25% to 100% over the same range. There is no downside risk for ratepayers. The Commission adopted the same specific Z-factor criteria for SoCalGas as was previously approved for Edison, with a $5 million deductible. Several programs are excluded from the PBR mechanism. A midterm review is required in the next Biennial Cost Allocation Proceeding (BCAP), with reports on annual performance and annual escalation updates. If earnings are either 300 basis points above the authorized rate of return or 175 basis points below the authorized rate of return for two years in a row, this will trigger an offramp review of the PBR mechanism. No results have been reported yet for SoCalGas' PBR mechanism.

The Proposed Settlement on Performance Indicators

The proposed settlement on performance indicators addresses safety, reliability, customer satisfaction, and call center responsiveness, as well as certain customer service guarantees. Performance indicators offer rewards and penalties for specific actions, as described above. Other than service guarantees, each of the performance indicators described below has a symmetrical reward and penalty. (See Appendix B for a comparison of each party's position and the settlement position.)

The proposed settlement agreement identifies certain performance indicators which SDG&E has agreed to withdraw. SDG&E agrees to provide to

the Commission and to the settling parties an annual report which provides quarterly data for various items related to customer service, emergencies, and call center responsiveness. Because tracking systems for several of these measures are not yet in place, SDG&E proposes to begin tracking this data two months after issuance of this decision. The first report will be submitted in early 2000, addressing data through December 31, 1999. SDG&E agrees to withdraw its proposed competition enhancement and environmental citizenship performance indicators. Finally, no party opposes SDG&E's proposal to gather data for the purposes of developing an electric system maintenance performance indicator.

We describe below each of the performance indicators proposed in the settlement agreement.

Safety Performance Indicator

The employee safety performance indicator is based on an Occupational Safety and Health Administration (OSHA) frequency standard. This standard compares SDG&E's regulated OSHA-reportable lost time and non-lost time injuries and illnesses to SDG&E employee working hours, as adjusted for personnel changes due to the approved merger between Enova and Pacific Enterprises. The settlement agreement recommends the following parameters:

Benchmark: OSHA-reportable rate of 8.80

Deadband: +/- 0.20

Liveband: +/- 1.20

Unit of change: 0.01

Incentive per unit: $25,000

Maximum incentive: +/- $3 million

Reliability Performance Indicators

Reliability is measured by various benchmarks which apply to SDG&E's facilities and exclude planned outages and major events (as defined in

D.96-09-045).[7] These benchmarks include the System Average Interruption Duration Index (SAIDI), the System Average Interruption Frequency Index (SAIFI), and the Momentary Average Interruption Frequency Index (MAIFI).

The following measures are recommended for the SAIDI:

Benchmark: 52 minutes (excluding underground cable failures) for each year 1999, 2000, 2001. 73 minutes (including underground cable failures) for 2002.

Deadband: 0

Liveband: +/- 15

Unit of change: 1

Incentive per unit: $250,000

Maximum incentive: +/- $3.75 million

The following measures are recommended for the SAIFI:

Benchmark: 0.90 outages per year

Deadband: 0

Liveband: +/- 0.15

Unit of change: 0.01

Incentive per unit: $250,000

Maximum incentive: +/- $3.75 million

The following measures are recommended for the MAIFI:

Benchmark: 1.28 outages per year

[7] Any events that are the direct result of failures in the Independent System Operator (ISO) controlled bulk power market or non-SDG&E owned transmission facilities are excluded from these reliability benchmarks. In addition, D.96-09-045 defines excludable major events as events caused by earthquake, fire, or storms of sufficient intensity to give rise to a state of emergency being declared by the government or any other disaster that affects more than 15% of the system facilities or 10% of the utility's customers, whichever is less for each event. (D.96-09-045, mimeo. at Appendix A, p. 2.)

Deadband: 0

Liveband: +/- 0.30

Unit of change: 0.015

Incentive per unit: $50,000

Maximum incentive: +/- $1million

Customer Satisfaction Performance Indicator

SDG&E's Customer Service Monitoring System (CSMS) indicator measures overall customer satisfaction with recent service transactions. The proposed CSMS measure is recommended with the following parameters:

Benchmark: 92.5% very satisfied

Deadband: +/- 0.5%

Liveband: +/- 2.0%

Unit of change: 0.1%

Incentive per unit: $75,000

Maximum incentive: +/- $1.5 million

Call Center Responsiveness Performance Indicator

This performance indicator measures SDG&E's responsiveness to customer telephone inquiries. The settlement agreement recommends the following parameters:

Benchmark: 80% of calls answered in 60 seconds, as measured on an annual basis

Deadband: 0

Liveband: +/- 15%

Unit of change: 0.1%

Incentive per unit: $10,000

Maximum incentive: +/- $1.5 million

No standard is recommended for emergency calls at this time.

Service Guarantees

The settling parties recommend that certain service guarantees be implemented but agree that in order to provide adequate time for implementation, SDG&E will begin these guarantees approximately two months after the issuance of this decision, but no sooner than April 1, 1999.

SDG&E makes appointments for services when access is required to the customer's premises and the customer requests to be present. These appointments may be set for a four-hour window when requested by customers or they may be set for a particular day. If SDG&E is not able to meet the appointment commitment, the customer's account will be credited with $50. However, if the customer is notified at least four hours before the end of the appointment period, SDG&E is excused from applying the credit. For establishment of service (turn-on orders), the customer will be credited with the applicable service establishment charge ($15 or $30) rather than $50. This guarantee does not apply to gas pilot light appointments, or if SDG&E documents that the service person missed the appointment due to natural disaster, labor strike or was called to work on an Emergency Order, including fire or explosion, broken or blowing gas line, high pressure gas, emergency carbon monoxide, and hazardous leaks. Emergency Orders are excluded from this guarantee, due to SDG&E's public safety obligations.

When a customer requests a date for a permanent new service establishment, SDG&E will turn on the new service on the day promised (prior to midnight) or credit the customer's account with the service establishment charge ($15 for electric service; $30 for both gas and electric service). The credit will not apply if at least 24 hours' notice of a date change is provided to the customer. Notice provided by message left on an answering machine or voice mail is sufficient. For the guarantee to be valid, there must be open access to the facility

and the meter panel or gas service; all required inspections must be completed and approved; there must be no threats of harm to employees; and credits will be paid only when the customer is currently without service. SDG&E agrees to develop a centralized complaint tracking system and will provide annual reports to the Commission and to settling parties on results achieved.

Discussion of Settlement on Performance Indicators

This is an "uncontested settlement" as defined in Rule 51(f), i.e., a settlement that "…is not contested by any party to the proceeding within the comment period after service of the stipulation or settlement on all parties to the proceeding." Rule 51.1(e) requires that settlement agreements must be reasonable in light of the whole record, consistent with the law, and in the public interest.

D.92-12-019 considered a settlement of the SDG&E 1993 General Rate Case. In that decision, the Commission outlined four criteria that must be satisfied in order for the Commission to approve an all-party settlement. The proposed settlement must specify:

> "a. that it commands the unanimous sponsorship of all active parties to the instant proceeding;
>
> "b. that the sponsoring parties are fairly reflective of the affected interests;
>
> "c. that no term of the settlement contravenes statutory provisions or prior commission decisions; …and
>
> "d. that the settlement conveys to the commission sufficient information to discharge our future regulatory obligations with respect to the parties and their interests." (D.92-12-019, 46 CPUC2d 538, 500-551 (1992).)

We are satisfied that the proposed settlement commands the sponsorship of all active parties sponsoring testimony on performance indicators. The sponsoring parties reflect a broad spectrum of affected interests. ORA represents

ratepayers in general, while UCAN represents residential and small commercial ratepayers in particular. Large customers, governmental interests, and agricultural customers are represented by FEA, City of San Diego, and Farm Bureau. CCUE represents the interests of utility employees in reliability and safety issues. NRDC considers the effects of such determinations upon the environment and SDG&E obviously considers the impact of the settlement on its shareholders. Considering the thorough review of SDG&E's proposals and the broad spectrum of interests supporting the proposed settlement, we are satisfied that sponsoring parties fairly reflect the affected interests.

The settlement is reasonable in light of the whole record and does not contravene any statute or prior Commission decision. SDG&E submitted extensive testimony and workpapers supporting its recommended revenue requirement increases. Similarly, ORA and UCAN conducted thorough investigations and analysis of SDG&E's request and developed their own recommendations. FEA, CCUE, and NRDC also submitted testimony addressing performance indicators.

Thus, the extensive testimony served by the settling parties provides sufficient information to the Commission to properly judge the reasonableness of the settlement and to discharge its future regulatory responsibilities. Parties have included a comparison exhibit, pursuant to Rule 51.1(c), which allows us to compare original positions to the proposed settlement amounts. The settlement is the result of the parties compromising and reaching agreement on their widely divergent positions, resulting in agreement on performance indicators related to safety, reliability, customer satisfaction, call center responsiveness, and service guarantees related to missed appointments and new installations.

SDG&E can earn or lose a maximum of $14.5 million from the rewards and penalties associated with performance indicators. We are satisfied that this

settlement is in the public interest and avoids costly litigation on these issues. We will make specific findings related to the proposed reporting requirements, which we discuss in the section addressing timing of reports, term of the PBR mechanism, and comprehensive reviews.

SDG&E's Proposal

SDG&E proposes to establish a completely new PBR mechanism for the period 1999-2002, but with the preference that this PBR mechanism would be perpetual. SDG&E proposes a rate index PBR, i.e., rates would be directly adjusted each year for escalation and a productivity offset. Rather than the usual sharing mechanism in which amounts to be shared are flowed back to ratepayers as a one-time adjustment, SDG&E proposes to use the sharing mechanism to adjust the starting point from which future rates are calculated. SDG&E characterizes this mechanism as a self-calibrating rate mechanism, in which information on the results of one year's performance is used to adjust the starting point for setting rates in future years. SDG&E argues that its proposed PBR mechanism should be evaluated in light of balancing all components of the mechanism. Although its parent company recently merged with Pacific Enterprises (the parent of SoCalGas), SDG&E states that SoCalGas' PBR design components are not applicable.

Rate Indexing

The rate indexing mechanism is captured in the following formula:

$Rate_{(n)} = (Rate_{(n-1)} * (1+ Esc - X)) + or - Z$

where Rate = electric distribution rate component or gas base rate component;

n = year for which rates are being determined

Esc = escalation or inflation factor

X = productivity factor; and

Z = exogenous factors to be either added or subtracted

SDG&E argues that a rate indexing mechanism is simpler and more direct than either a revenue requirement indexing mechanism or a revenue-per-customer indexing mechanism. Each rate component is adjusted annually according to the above formula. A revenue requirement indexing formula applies an index to a total revenue requirement. The resulting revenue requirement is then used to establish rates through use of a forecast of kilowatt hours or therms delivered. Balancing accounts are used to true-up the revenue amount when subsequent actual volumes do not match. These mechanisms often include a component to account for customer growth. A rate mechanism usually does not include such a component and applies an indexing formula directly to rates.

SDG&E argues that a rate indexing mechanism is appropriate because the Commission has eliminated the Electric Revenue Adjustment Mechanism (ERAM), which was the balancing account used to true-up the revenue requirements for recorded sales versus forecast sales on the electric side. SDG&E also proposes to eliminate the Gas Fixed Costs Account (GFCA) as of the beginning of 1999. If both of these accounts are eliminated and a rate indexing mechanism is used, SDG&E asserts that it is now subject to the risk of variations in delivery quantities. If actual delivered throughput (whether kilowatts or therms) differs from the throughput used to determine the initial starting rate, SDG&E will either gain revenue through greater sales or lose revenue if sales are less than forecast. Because there is no adjustment for customer growth, SDG&E is at risk to recover the costs of new customers out of the revenue stemming from the increases in volumes delivered.

Escalation

As described in Exhibit 74, SDG&E's proposed escalation measure is based on historical and forecasted industry-specific data, published quarterly. Separate escalation factors are used for electric and gas. Each proposed index is designed to measure changes in price levels of labor, nonlabor and capital inputs purchased by utilities. SDG&E asserts that this methodology is superior to using a national aggregate price index, such as the CPI, because these CPI-type indices are not designed to provide a framework for analyzing changes in the price level of inputs purchased by utilities, but measure economy-wide changes in the price level of goods and services.

The base rate cost indices proposed by SDG&E are composed of national-level utility-specific cost indices obtained from the Standard & Poor's DRI/McGraw-Hill Economic and Utility Cost Forecasting Services (DRI). The component national level utility cost indices are combined into base rate cost indices using expenditure weights developed from historical expenditures by electric and gas utilities located in California. SDG&E explains that the base rate cost indices are designed to measure changes in the price level of inputs that California electric distribution and gas utilities purchase to operate and maintain public utility assets.

This cost escalation proposal is generally based on the methodology adopted for SoCalGas in D.97-07-054. SDG&E proposes to use average hourly earnings for electric, gas, and sanitary services as the basis for its labor cost index for both electric distribution and gas. Historical data is reported by the United States Bureau of Labor Statistics (BLS) and this data forms the basis of the DRI labor cost index referred to as AHE49NS. Forecasts of this index are readily available from DRI. The proposed labor cost index differs slightly from that adopted for SoCalGas, which is based on two indices.

The proposed index for electric distribution nonlabor O&M expenses utilizes five DRI cost indices: total distribution plant O&M cost index (JEDOMMS), customer accounts operation cost index (JECAOMS), customer service and information operation cost index (JECSIIOMS), sales operation cost index (JESALOMS), and total administrative and general O&M cost index (JEADGOMMS). SDG&E proposes to use the DRI total gas utility nonlabor O&M cost index (JGTOTALMS), the same index adopted for SoCalGas.

The proposed cost index for capital-related electric distribution costs is based on an estimate of the rental price of electric distribution utility structures, which is estimated from three data series obtained from DRI: rental price of capital - nonresidential structures-public utilities (ICNRCOSTPU); chain type price index - investment in nonresidential structures - public utilities (PCWICNRPU), and the Handy-Whitman electric utility construction cost index - total distribution plant, Pacific Region (JUEPD@PCF). All of these indices are obtained from DRI. The proposed cost index for capital related gas costs is based on an estimate of the rental price of gas utility structures, which is estimated from three data series obtained from DRI: rental price of capital - nonresidential structures-public utilities (ICNRCOSTPU); chain type price index - investment in nonresidential structures - public utilities (PCWICNRPU), and the Handy-Whitman gas utility construction cost index-total plant, Pacific Region (JUG@PCF).

While the fundamental basis of the capital-related cost indices is the same as that adopted for SoCalGas, SDG&E proposes to use a three-year moving average of the rental price of utility structures to calculate the capital-related cost indices. SDG&E believes this approach reduces the volatility related to rental prices of public utility structures which means that annual changes in the base rates escalated with these indices are less variable.

The cost indices for electric distribution and gas base rates are each a weighted average of the component cost indices for labor, nonlabor, and capital-related expenses, as described above. The weights used to construct the weighted average are based on average state-level electric distribution expenditures or gas utility expenditures expressed in real 1996 dollars for the period 1992-1996. The annual adjustments for electric distribution base rates average 1.9% per year from 1993 through 1996 compared to average projected adjustments of 1.2% per year from 1997 through 1999. The annual adjustments for gas base rates average 2.5% per year from 1996 through 1996 compared to an average projected adjustment of 1.9% per year from 1997 through 1999.

SDG&E's escalation proposal has not been challenged. Starting in the year 2000, SDG&E proposes to use the percentage changes in the base rate cost indices in the rate indexing formulae to adjust the electric distribution and gas base rates for changes in the cost of inputs purchased by the utility. Exhibit 28 demonstrates that electric escalation is forecasted to average 1.2%, which is 120 basis points below the CPI, which ORA forecasted to average 2.4% over the 1997-2002 time period.

SDG&E will continue to rely on the Market Indexed Capital Adjustment Mechanism (MICAM) to true-up the cost of capital in base rates for significant changes in nominal interest rates. SDG&E explains that the capital-related cost indices provide a basis for partial annual adjustments to base rates for changes in the cost of capital. These partial adjustments would only affect base rates in years when MICAM is not triggered. MICAM adjustments are only made after

interest rates change by 100 basis points or more from the previous benchmark.[8] In years when a MICAM adjustment is triggered, the annual cost of capital adjustments embedded in the PBR cost escalation proposal would be trued up to the MICAM adjustment cost of capital.

Productivity Factors

SDG&E proposes to apply a 0.92 productivity factor for electric distribution and a 0.68 productivity factor for gas. These factors were developed from a national utility industry study conducted by Christensen Associates, which developed Total Factor Productivity (TFP) indices. A TFP index measures the ratio of its output quantity index to its input quantity index. It compares the growth trend in the unit cost of the industry to the trend in prices of labor, capital services, and other production inputs.

SDG&E argues that an industry-wide study is appropriate to develop productivity factors because this approach is comparable to the operation of competitive markets. SDG&E states that this study was undertaken in response to the Commission's direction in D.96-09-092, the Edison PBR decision:

> "The price and productivity values should come from national or industry measures and not from the utility itself. … The productivity measure should come from a forecast of industry-specific productivity." (D.96-09-092, mimeo. at p. 15.)

Despite the fact that its proposed productivity factors are less than those adopted for any other energy utility, SDG&E asserts that no stretch factor is necessary. A stretch factor is an addition to the productivity factor to ensure that the utility to which it is applied is indeed "stretching" to achieve efficiency gains.

[8] Interest rates are measured by averaging the yield on a single-A utility bonds over a six-month period from April to September.

SDG&E argues that the use of a stretch factor is only appropriate when there is a change from traditional ratemaking to PBR, when there is the presumption that significant efficiency gains may be realized, or when there is uncertainty about the level of an appropriate productivity factor. In SDG&E's view, none of these circumstances apply. SDG&E also argues that because the earnings sharing calibration guarantees any gains will benefit customers in future years, the calibration approach is essentially a stretch factor. Finally, SDG&E urges us to consider its proposed productivity factors in conjunction with the proposed escalation methodology. SDG&E contends that using a utility-specific inflation index makes achieving productivity gains more difficult because the update rule will result in a lower figure than if a different measure of inflation were used.

Earnings Sharing

SDG&E's proposed symmetrical earnings sharing mechanism is designed to incorporate a self-calibrating feature to the rate setting formula. Rather than providing customers with a one-time adjustment based on the outcome of the sharing mechanism, SDG&E proposes to adjust the next year's indexing of rates. The actual net operating income is compared to that of the authorized rate of return. The difference is then subject to earnings sharing. The proposed mechanism contains a symmetrical 100-basis-point deadband, i.e., shareholders are responsible for the first 100 basis points (1%) over or under the authorized rate of return. Outside the deadband, in the liveband, 20% of any gains or losses is flowed through to the customer through an adjustment to the next year's rates.

The deadband is designed to account for gains and losses associated with routine operation of the company. SDG&E acknowledges that its proposed deadband is larger than that adopted for either Edison (50 basis points around Edison's authorized return on equity) or SoCalGas (25 basis points above SoCalGas' authorized rate of return). SDG&E argues that its deadband should

be wider than Edison's because 1) short-run temperature-based sales fluctuations are more volatile for gas customers than electric customers, 2) the deadband should account for changes in throughput resulting from electric industry restructuring, and 3) removing generation and transmission from the PBR means that the earnings sharing component operates on lower overall net operating income. Because SoCalGas did not eliminate the Core Fixed Cost Account, SDG&E contends that the Commission explicitly adjusted SoCalGas' deadband downward to account for the reduced risk of routine operations. SoCalGas' deadband is also adjusted to account for a declining rate base.

SDG&E explains that the self-calibrating nature of its proposed sharing mechanism justifies the low 20% it proposes to "share" with customers. According to SDG&E, the 20% adjustment in rates would be carried forward indefinitely and would compound through the term of the PBR mechanism. The savings compound over time, because the prospective adjustments to rates are permanent. SDG&E maintains that such adjustments ensure that shareholders and ratepayers won't have to pay taxes on the difference between what would have been collected under more traditional earnings sharing mechanisms and the proposed mechanism. SDG&E admits that the power of the earnings sharing mechanism is inextricably tied to the term of the mechanism. The proposed sharing rate of 20% of actual returns above deadband is associated with the proposed five-year initial term for the mechanism. Due to the compounding effect, if a longer term were adopted, SDG&E states that a lower sharing percentage would achieve the same effect. If a shorter term were adopted, a higher sharing percentage would be required to achieve the same impact. SDG&E recommends that the sharing mechanism be symmetrical, i.e., any losses outside of the deadband would be reflected in permanent increases in rates using the same self-calibrating approach.

SDG&E believes that a "utility's best incentive to pursue productivity-enhancing investments would be to allow the utility to retain 100% of the benefit of those investments." (Exhibit 8, p. PBR5-5.) While acknowledging that this approach is unlikely to be implemented, SDG&E recommends that a symmetrical sharing mechanism with a reasonably large deadband makes sense according to economic theory and in terms of equity because the deadband is sized to the amount of risk absorbed by the utility and still allows customers to share in the efficiency gains. Thus, the proposed earnings sharing mechanism is neither progressive nor regressive. While recognizing that the bulk of the benefits accrue to the utility, SDG&E believes this is counteracted by compounding the customers' share of the gains in future years.

Z factor and Exclusions

SDG&E recommends that the nine criteria adopted for Z-factor treatment in Edison's and SoCalGas' PBR be applied to its proposed mechanism.

Pursuant to the cost of service settlement adopted in D.98-12-038, certain costs will not be included in the PBR mechanism, but are subject to other forms of ratemaking. Tree-trimming expenses are not included in the PBR sharing mechanism, but are subject to a one-way balancing account. For the duration of the PBR period, revenues and incurred expenses for tree trimming will be excluded from the indexing mechanism and from recorded base rate revenue expenses before SDG&E calculates its actual earned rate of return for revenue sharing purposes.[9] In addition, costs attributable to senior executive retirement plans or executive bonuses are also excluded from the indexing mechanism and

[9] If SDG&E achieves and documents a 50% reduction in tree-trimming expenses from its 1999 budget, SDG&E may request termination of balancing account treatment.

from earnings sharing during the PBR period. The costs for the Natural Gas Vehicle (NGV) program will be excluded for the year 2000 update rule because they are recovered under the NGV balancing account, which is expected to be eliminated at the end of 2000. Future costs related to the Catastrophic Event Memorandum Account (CEMA) and the Gas Hazardous Substance Cost Recovery Account will be recovered through those respective balancing accounts, not through the PBR.

Offramps

SDG&E proposes to retain the offramps existing in its base rate PBR mechanism. There is a voluntary offramp at 150 basis points below the authorized rate of return and a mandatory review of the mechanism if SDG&E's actual rate of return varies by 300 basis points from the authorized rate of return.

SDG&E does not propose a new mechanism to update for changes in the cost of capital. SDG&E's current cost of capital mechanism, the MICAM, is proposed to continue unless changed by the cost of capital proceeding which is to be filed in May 1998.[10] The results of that proceeding will be incorporated into the 1999 starting point rates. Changes resulting from the MICAM or any subsequent mechanism will be incorporated in future annual indexing changes.

Elimination of the Gas Fixed Cost Account (GFCA)

SDG&E proposes to eliminate the GFCA as it applies to SDG&E's gas base costs as of the beginning of 1999. SDG&E maintains this approach is consistent with Commission policy and with its proposed establishment for rate indexing. On the electric side, ERAM was eliminated in D.97-10-057. SDG&E explains that

[10] SDG&E's cost of capital application was filed in May 1998. A decision in that proceeding is expected in the Spring of 1999.

there is no reason to track differences between forecasted and actual sales with a rate index PBR mechanism.

ORA's Proposal

ORA agrees that a rate indexing mechanism should be adopted, but otherwise prefers a PBR mechanism modeled after SoCalGas' PBR. ORA proposes that a stretch factor be added to SDG&E's proposed productivity factors, that a 25-basis-point deadband be adopted, and that a progressive sharing mechanism similar to SoCalGas' be adopted. ORA contends that there is little evidence to support the workings of SDG&E's proposed self-calibration mechanism, which has not been adopted by any other public utilities commission in the United States.

ORA recommends that a stretch factor of 100 basis points be applied to the productivity factors proposed by SDG&E. ORA points out that all other energy utilities operating under a PBR mechanism have stretch factors incorporated within their productivity factors. ORA dismisses SDG&E's use of the results of the Christensen Associates' study of the productivity of a national sample of utilities, which recommends a .92% productivity factor for electric and .68% for gas operations. ORA reminds us that the component utilities in this study consisted largely of utilities subject to traditional cost of service regulation. ORA contends that basing an average productivity factor on utilities under such traditional regulation results in only an average productivity factor, which is not appropriate to be applied to SDG&E. ORA recommends that we consider a paper prepared by the National Economic Research Associates (NERA) (Reference Item G). This study found that the average total factor productivity of electric utilities increased by 2.08% per year over the period 1984-1994, which is even greater than the 1.94% ORA proposes for electric operations.

While ORA admits that the mechanics of SDG&E's proposed escalation methodology may result in more challenging productivity improvements, ORA submits that this effect is irrelevant. ORA recommends that use of a utility-specific inflation index is appropriate because it reflects the actual inflationary pressures experienced by the distribution utility, rather than a more broadly based measure that reflects the performance of all sectors of the economy.

ORA asserts that SDG&E's proposed mechanism is inequitable and continues the results of the base rate PBR. In ORA's view, the fact that SDG&E was able to earn approximately $130 million above its authorized rate of return over the past four years, with ratepayers receiving approximately $11 million, is evidence that the previous PBR mechanism was overly generous to shareholders. ORA believes that a more equitable mechanism would have shared the $130 million equally between shareholders and ratepayers. ORA explains that the majority of the $130 million accruing to shareholders came from earnings within SDG&E's deadband. ORA fears that the wide deadband proposed by SDG&E in this proceeding could lead to similar results. Thus, ORA recommends that a 25-basis-point deadband be adopted for SDG&E, identical to that adopted for SoCalGas.

While ORA supports a rate indexing mechanism because this approach sends the proper signals to utility management to control costs of operation, ORA also recommends that any excess earnings above the authorized rate of return be used to accelerate the recovery of transition costs. Under ORA's proposal, these excess earnings would be credited to the Transition Cost Balancing Account (TCBA). "ORA does not believe that increasing electric sales should lead to higher profits for SDG&E absent some improved corporate performance that accompanies those increased sales." (ORA opening brief, at p. 14.)

ORA recommends the same progressive sharing approach adopted for SoCalGas. ORA maintains that this approach correctly aligns shareholder and ratepayer interests by awarding an increasingly higher proportion of earnings above the authorized rate of return to shareholders when SDG&E achieves more difficult efficiencies and cost savings.

ORA supports SDG&E's proposed Z-factor treatment, but also urges us to apply Z-factor treatment to Postretirement Benefits Other than Pensions (PBOPs). According to ORA, several decisions state that PBOP costs shall be recovered through a Z-factor adjustment in annual filings. If this approach is not adopted, ORA is concerned that unreasonable windfall profits will accrue to utility shareholders. ORA contends that the Z-factor ratemaking approach for PBOPs applies to energy utilities as well as telecommunication utilities.

ORA supports SDG&E's proposal to eliminate the GFCA, but recommends that it be terminated as of April 30, 1999, which is the date that coincides with the ending month of the account's annual cycle. The GFCA records the difference between authorized base revenue requirement and recovery of base revenues plus other charges related to the transportation and delivery of gas. The Commission authorizes the base revenue requirement and a recovery rate based on predicted volumes or gas sales as part of SDG&E's Biennial Cost Allocation Proceedings (BCAP). The purpose of the GFCA is to track expenses and revenues over an annual cycle and the account's over- or undercollection at the end of the cycle depends on how closely actual sales match forecasted sales.

ORA is concerned that SDG&E's proposal to terminate the account as of January 1, 1999 would result in considering only a partial yearly cycle for this last year, which would result in SDG&E accruing an undercollection of as much as $8 million, which would then have to be collected from ratepayers. This effect occurs because residential heating loads cause monthly revenues to accrue to the

GFCA in a consistent annual pattern. Revenues collected December through March exceed recorded expenses, while revenues collected April through November are not equal to expenses. Therefore, the account's balance is generally closer to zero at the end of the winter heating season, and ORA recommends that this account be terminated at that time.

UCAN's Proposal

UCAN believes that a PBR mechanism must demonstrably benefit customers and should be designed to put downward pressure on rates. UCAN argues that the PBR mechanism should model competition where it does not exist and that the interests of the ratepayers are a critical consideration in approving a PBR proposal.

UCAN recommends that a revenue-per-customer index method be adopted for a PBR mechanism to last five years, expiring at the time when the merger savings mechanism expires. UCAN asserts that the revenue-per-customer methodology counters SDG&E's incentive to increase sales, is consistent with Christensen Associates' study of productivity estimates, avoids the problem of windfalls accruing to SDG&E, and sends proper signals regarding costs, i.e., to reduce utility energy service costs per customer. UCAN explains that the revenue-per-customer approach can be implemented using recorded data, although it agrees that a demand forecast is necessary for purposes of retaining the GFCA.

UCAN asserts that a PBR mechanism must distinguish between monopoly and competitive services and therefore recommends that three separate PBR mechanisms be adopted. UCAN asserts that under a single PBR mechanism, SDG&E could cross-subsidize efficiency losses in one area with gains in another and recommends that the PBR mechanisms should be separately unbundled into

electric wires, electric metering and billing, gas pipes, and gas metering and billing.

UCAN believes that SDG&E's proposed productivity factors are too low. UCAN states that SDG&E's current productivity level is 1.5% and should not be decreased to .92% on the electric side. UCAN explains that an X factor or an indexing method should be selected so that ratepayers are at least as well off under PBR regulation as they would have been under traditional ratemaking. Because SDG&E's electric revenues will increase more rapidly than the increase in the number of customers as throughput per customer grows, UCAN asserts that SDG&E's revenues are weighted towards throughput. Therefore, Christensen Associates' model which is based largely on number of customers served is inappropriate.

UCAN agrees that a "base" productivity factor of 0.92% for electricity and 0.68% for gas, assuming revenue per customer, is appropriate. UCAN also recommends that a stretch factor be applied to these base figures and argues that stretch factors are appropriately applied to industries facing competitive pressure. UCAN recommends a stretch factor of 0.75% for electric and gas distribution and 1.00% for metering and billing, because communications technologies and impacts of competition are improving productivity more rapidly. As adjusted for issues addressed by the cost of service settlement and to remove one-time costs, as demonstrated in Exhibit 32, updated by Exhibit 33, UCAN proposes a productivity factor of 1.9% for the PBR applying to electric wires (electric distribution), 2.0% for the PBR applying to electric and gas metering and billing, and 2.2% for the PBR applying to gas pipes (gas transmission and distribution).

UCAN believes that it is critical to adopt a similar sharing mechanism as is established for SoCalGas. UCAN asserts that SDG&E and SoCalGas share gas

service persons, customer service functions and allocate common administrative and general (A&G) costs. Therefore, UCAN agrees with ORA that a progressive earnings sharing mechanism similar to SoCalGas' should be adopted, with a 25-basis-point deadband for electric and gas distribution and no sharing of losses, but recommends that the GFCA be retained.

UCAN recommends a different deadband for electric and gas metering and billing functions. UCAN proposes that a deadband of after-tax profits above the benchmark rate of return equal to 1% of total metering and billing revenues be used for earnings sharing in the proposed metering and billing PBR. UCAN explains that this figure is approximately equal to the combined electric and gas distribution deadbands as a percentage of revenue and reflects the GFCA.

UCAN recommends that ratepayers receive 70% of incremental sharing immediately above the deadband, which would decline linearly to a 10% ratepayer share at 300 basis points above the benchmark, or 10% of revenue for metering and billing. This approach would encourage savings by SDG&E while ensuring that ratepayers obtain significant sharing over a wide range of outcomes.

UCAN recommends that the GFCA be retained because gas sales fluctuations are largely weather driven. More importantly, UCAN believes that eliminating the GFCA creates perverse incentives under any PBR mechanism, but particularly under SDG&E's calibrated sharing mechanism. According to UCAN, very cold weather could increase sales and result in a large cash surplus accruing to SDG&E, which must then be spent or returned to customers. UCAN maintains that this perverse incentive prompts SDG&E's proposal to implement a wide deadband, but argues that retaining the GFCA eliminates risk and has the advantage of narrowing the deadband required by SDG&E.

UCAN agrees that Z factors should be limited to those costs successfully meeting the nine criteria adopted for Edison and SoCalGas. UCAN proposes limited Z factors and offramps and maintains that public purpose programs should be excluded from PBR treatment, as well as direct access costs, pensions, premium payments made by affiliates for labor transfers and intellectual property, generation-related franchise fees, and nonrecurring costs. UCAN asserts that we should also consider reopening the PBR structure in the event that significant changes are made to the responsibility of the utility for providing services or equipment. UCAN argues that the 150-basis-point voluntary offramp should be removed, but that the 300-basis-point offramp be expanded to 400 basis points.

FEA's Proposal

FEA recommends a rate index similar to that in place for Edison. FEA believes that a rate index is logical and straightforward and opposes a revenue-per-customer approach. FEA contends that the proposed productivity factor for electric operations is too low and recommends a Multi-Factor Productivity (MFP) analysis yielding a productivity factor of 1.17%.

FEA prefers Edison's progressive sharing mechanism based on return on equity, but does not oppose the use of SoCalGas' progressive sharing based on a benchmark rate of return. FEA asserts that SDG&E's proposed deadband is too wide and would allow SDG&E to reap substantial benefits. FEA explains that this proposed deadband is equivalent to $24 million in revenues and $14.5 million in operating income, assuming a tax rate of 40%. While acknowledging that the deadband encompasses both gains and losses, FEA is concerned that the first $14.5 million of benefits (or losses) would go to shareholders before customers see any benefits. FEA assumes that since the PBR is designed to encourage improvements in productivity, SDG&E would tend to

seek out efficiencies and earn in excess of its benchmark rate of return, all things being equal.

FEA points out that the deadbands for other mechanisms are significantly more narrow than 100 basis points. Edison has a PBR with an earnings sharing deadband of 50 basis points above or below authorized return on equity. Since equity comprises approximately 50% of SDG&E's capital structure, a 50-basis-point deadband on return on equity translates to a 25-basis-point deadband on authorized rate of return. The SoCalGas earnings sharing deadband is 25 basis points above the benchmark rate of return, but has no similar deadband for losses.

FEA believes SDG&E's proposed 20% calibration mechanism is inequitable to customers. FEA recommends a progressive sharing mechanism, as is currently in place for both Edison and SoCalGas. FEA asserts that this progressive structure is more reasonable because it provides customers with the benefit of most of the initial savings gains, which are those most easily accomplished. As more difficult efficiency gains are achieved, shareholders appropriately retain more earnings.

FEA believes that the self-calibrating mechanism benefits customers only in circumstances where there is a large one-time savings which is not repeated in subsequent years. As Exhibit 6 demonstrates, FEA expects that productivity benefits would compound over time. FEA doubts the tax savings benefit of the self-calibration mechanism alleged by SDG&E. FEA maintains that for tax purposes, it is immaterial whether the utility makes a one-time refund to ratepayers or reduces rates by the same amount.

FEA states that Exhibits 100 and 101 demonstrate that the Edison and SoCalGas PBR mechanisms are more favorable to customers than the SDG&E

proposed approach. SDG&E's mechanism benefits consumers where earnings are below the authorized rate of return, which is contrary to PBR expectations.

NRDC's Proposal

NRDC recommends that a revenue-per-customer indexing mechanism be adopted, rather than a rate indexing approach. NRDC contends that SDG&E's proposed approach creates perverse incentives, because it would reward SDG&E for load building and sales increases. As demonstrated in Exhibit 24, a 2% sales increase results in an $11.8 million increase in revenues, which approximates a 5% increase in profits. NRDC maintains that because a rate indexing mechanism creates penalties (in terms of reduced profits) for reduced sales, this approach would create a disincentive for SDG&E to pursue energy efficiency and other demand-side management (DSM) measures. NRDC explains that the utilities will have a continued role in administering DSM programs until the end of 1999 and may continue to act as contract administrators after that time. NRDC asserts that such disincentives could lead to discouraging affiliates from investing in energy efficiency or promoting energy consuming appliances, as has occurred for other utility distribution companies. For these reasons, NRDC predicts that a rate indexing mechanism will have adverse environmental impacts.

NRDC therefore supports UCAN's proposal for a revenue-per-customer indexing methodology. For electricity, the rates in the current period would be adjusted for three factors in order to determine rates for the next period. First, current period rates would be multiplied by the update rule (i.e., 1+ escalation - X). Second, this result would be multiplied by customer growth (1 + customer growth). Third, this result is divided by (1 + growth in weather adjusted sales per customer). The revenue-per-customer methodology requires deriving two calculations: customer growth and weather-adjusted sales per customer, which

can be obtained from recorded data. NRDC notes that this approach is similar to that adopted for SoCalGas.

NRDC observes that certain concerns were expressed in Edison's PBR proceeding regarding the revenue requirement indexing approach, which included the need for controversial sales forecasts or balancing accounts, the need for customer forecasts, incremental cost forecasts, and growth allowances, which are all eliminated in the revenue-per-customer mechanism. While acknowledging ORA's support for the rate indexing approach, NRDC explains that ORA criticizes the "windfall profits" SDG&E stands to benefit from under this approach and ORA proposes that earnings above the authorized rate of return be applied to the TCBA to pay off transition costs as quickly as possible. (Exhibit 24, p. 1-8.)

NRDC also recommends that a distributed resources performance indicator be adopted. Distributed resources are also known as distributed generation. On December 17, 1998, we instituted Rulemaking (R.) 98-12-015, in which we defined distributed generation as follows:

> "Also referred to as 'distributed energy resources' (DER) or 'distributed resources' (DR). [Distributed generation] generally refers to generation, storage, or demand-side management (DSM) devices, measures, and/or technologies that are connected to or injected into the distribution level of the transmission and distribution (T&D) grid (i.e., "below" the bulk power transmission system). Micro-turbines, fuel cells, photovoltaics, wind turbines, and flywheels are some examples of [distributed generation] technologies. Because these devices are more modular and flexible than a large central power station, they can be located at the customer's premises on either the system side or the customer side of the meter, or at other points in the distribution system such as a UDC substation. [Distributed generation] covers a wide range of technologies and is not exclusively limited to cogeneration." (R.98-12-015, mimeo. at p. 2.)

Because distributed generation has the potential to offer significant environmental and economic benefits and because the UDCs may have an important role to play in facilitating the use of these resources, NRDC advocates implementing a performance indicator rewarding SDG&E for such facilitation. NRDC maintains that SDG&E has no incentive to facilitate the use of distributed generation under current regulation and would have a disincentive to encourage distributed generation under a rate index. Even under a revenue-per-customer approach, NRDC believes that SDG&E would be neutral in encouraging use of distributed generation technologies. Therefore, NRDC recommends implementing a performance indicator which applies a reward or penalty of $3 million to provide the necessary incentive. NRDC proposes that this performance indicator be adopted in the PBR proceeding, but that details of the performance indicator be developed in the rulemaking. NRDC recognizes that it is somewhat unusual to propose such a placeholder, but asserts that it is important to do so now rather than wait until the term of this PBR has expired to develop such an incentive mechanism.

City of San Diego's Proposal

In its opening brief, City of San Diego supports a rate indexing mechanism, but recommends that a stretch factor be incorporated into SDG&E's proposed productivity factors. City of San Diego points out that a margin should be included in the productivity factors to protect consumers from inexact forecasts of future productivity trends and recommends that SDG&E be encouraged to stretch beyond the amount of historical productivity in the utility industry, which is one of the main purposes of PBR regulation. City of San Diego recommends comparable productivity factors to those adopted to Edison and SoCalGas: 1.2%, 1.4%, and 1.6% on the electric side and 1.2%, 1.3%, and 1.4% on the gas side. These values represent a midway position between the high and low proposals in

this proceeding. Because SDG&E competes within the same industry within Southern California, City of San Diego believes productivity improvements should be roughly similar.

City of San Diego essentially supports ORA's proposal and recommends that a progressive earnings sharing mechanism similar to SoCalGas' be adopted. City of San Diego asserts that the merged utilities should share the same type of PBR mechanism and thinks consumers in San Diego should benefit from the same type of mechanism enjoyed by consumers in SoCalGas' service territory. City of San Diego prefers SoCalGas' approach over Edison's because ratepayers are insulated from downside risk, i.e., they do not share in losses below the authorized rate of return. However, City of San Diego recommends a 50-basis-point deadband rather than a 25-basis-point deadband because if the GFCA is eliminated, SDG&E is at greater risk from sales fluctuations in gas throughput than is SoCalGas. City of San Diego also believes that SDG&E should be rewarded for proposing an electric escalation factor based on utility industry inputs which is less advantageous to shareholders.

Monitoring and Evaluation Stipulation

SDG&E and UCAN each submitted recommendations concerning measurement and evaluation of the proposed distribution PBR mechanism. Because the cost of service settlement adopted in D.98-12-038 includes a cost of service review in 2002, these parties were able to reach stipulation on measurement and evaluation issues.

The stipulation proposes that by February 15 of each year, SDG&E will file an annual electric distribution report that addresses the performance indicators and earnings sharing results for the previous calendar year. This report will be filed by advice letter with the Commission's Energy Division. Within 45 days after the end of each calendar quarter, SDG&E will submit quarterly reports to

the Energy Division and interested parties that address the 12 months-to-date sharing and year-to-date performance indicator results. SDG&E and UCAN believe that a cost of service review in 2002 precludes the necessity for a comprehensive review. Future evaluative reports will be determined in those cost of service proceedings.

SDG&E and UCAN recommend that performance over the 1999-2001 time frame be reviewed in a timely fashion so that this analysis can be incorporated into the 2002 cost of service proceeding. These parties suggest that the evaluation process begin early in 2001 with a workshop facilitated by the Energy Division. The goals of this workshop would be to develop appropriate evaluative criteria for the review, establish whether an independent review is necessary, and, if so, how it should be conducted.

SDG&E and UCAN suggest that an independent evaluation may be necessary if the Energy Division and ORA indicate that they cannot conduct a timely and comprehensive evaluation of the PBR mechanism. According to the stipulation, the parties would select the independent consultant using a Request for Proposal (RFP) process not to exceed $400,000. SDG&E and UCAN suggest that the cost of this consultant be shared equally between the ratepayers and shareholders. If parties can't agree on a consultant, the Energy Division would select the consultant based on nominations from the parties. The consultant would enter into a contract with SDG&E, approved by the Energy Division. SDG&E would be able to submit its own evaluative report at the same time other parties or the independent consultant submit their reports.

SDG&E and UCAN suggest that the goals of this PBR mechanism should be articulated in this decision and evaluation of the mechanism should be based on these goals.

Discussion

SDG&E recommends a "new and innovative approach" to PBR and incentive regulation. While several PBR mechanisms are in place, we have not developed consistent and rigorous evaluative criteria. Thus, we do not yet have measurable results delineating how incentive ratemaking motivates utility management. We are always open to consideration of a "new and innovative approach" to PBR ratemaking that will serve the public interest and achieve our broadly stated goals related to PBR regulation. However, we are not convinced that the SDG&E proposal is the best approach to meeting our goals.

Rather, we are persuaded that the most reasonable and prudent approach is to model SDG&E's distribution PBR mechanism after that adopted for SoCalGas where applicable, and for Edison where applicable. ORA, UCAN, and NRDC support the SoCalGas approach as a matter of general principle, as does the City of San Diego. SDG&E's approach is different from both the SoCalGas or Edison approaches, but has elements of both. While we have often stated that "one size does not fit all" in terms of applying PBR mechanisms to California's utilities, the record demonstrates that adopting a mechanism incorporating elements of both PBRs (although not as proposed by SDG&E) allows both the shareholders and the customers to benefit.

The term of the adopted PBR is 1999 through 2002. D.98-12-038 adopted a cost of service settlement, in which parties have agreed that SDG&E must file a 2003 cost of service study no later than December 21, 2001. We affirm that recommendation here. We also make provisions for a comprehensive review, as discussed below. There is no dispute regarding the escalation methodology proposed by SDG&E; therefore, we adopt this methodology. (See Attachment 1.)

While we agree with UCAN that a PBR mechanism must distinguish between monopoly and competitive services, we will not adopt the proposal to

establish separate PBR mechanisms for electric wires, electric metering and billing, gas pipes, and gas metering and billing. Although we are exploring the competitive nature of metering and billing services, UCAN's proposal is premature. In addition, this approach would add needless complexity to the PBR mechanism.

However, we recognize it is possible that SDG&E could subsidize efficiency losses in competitive services with gains in monopoly services. Therefore, we will consider this issue during the comprehensive review and will require parties to develop monitoring and evaluative criteria to track such possibilities, as discussed below. Similarly, we are not convinced that a performance indicator for distributed generation should be established at this time. NRDC's proposal is premature. Such performance indicators should be established if we develop a particular approach for distributed generation, as determined in R.98-12-015.

The PBR Indexing Formula

We must choose between two proposals for the indexing formula: a rate indexing formula or a revenue-per-customer formula. We adopt the rate indexing approach. A primary purpose of PBR regulation is to provide the proper incentives to SDG&E management. We assume that SDG&E management will then act on those incentives. The rate indexing approach provides an incentive to increase sales. The revenue-per-customer approach attempts to mute this incentive by eliminating the opportunity to profit from sales increases which do not result from management actions.

However, we prefer a Rate Indexing mechanism for several reasons. First it is a simpler mechanism, requiring fewer calculations and adjustments. Second, it is closer to the Edison mechanism which is more comparable in this instance to the SDG&E situation; the SoCalGas revenue/customer index was substantially

dictated by the Global Settlement. Third, the NRDC environmental concerns are being addressed through other policies. SDG&E is required by AB 1890 to spend $32 million/year on demand-side management and energy efficiency programs. SDG&E has been operating under a rate indexing method throughout its PBR experiment; no party represents that SDG&E has failed to put forth appropriate efforts to achieve energy efficiency. There are other related policies implemented for similar environmental purposes; for example, the California Energy Commission has allocated many millions for renewables credits and other related programs designed to mitigate plant emissions. The rate indexing method also comports with our goal of using PBR mechanisms to assist the utilities in making the transition from a tightly regulated structure to one that is more competitive. We will adopt the rate indexing mechanism and address any potential windfall by an adjustment to the mechanism. While recommending a rate index, ORA also recommends that all excess revenues be used to offset transition costs. ORA proposes this approach because of the concern that SDG&E could earn windfall profits due to a sales increase, but admits that we have rejected this approach in D.97-10-057. ORA also advocates eliminating the GFCA, but proposes delaying its elimination due to concern over another potential windfall because of timing. ORA thus strongly caution us against a potential sales windfall. As discussed below, we will adopt a modification to the sharing mechanism to mitigate against this windfall.

We eliminated the ERAM and Energy Cost Adjustment Clause (ECAC) balancing accounts because of changes in the regulatory environment. Under our adopted PBR, it is also appropriate to eliminate the GFCA, to eliminate balancing account treatment for sales volatility. While SDG&E now argues that a wide deadband is required to absorb the risk of sales volatility, it would be inappropriate to now allow SDG&E a large deadband to essentially absorb the

"risk" of sales volatility, when it can generally be expected from historical trends that sales will increase, and under a rate index SDG&E will have an incentive to increase sales when advantageous to shareholders. We will adopt ORA's proposal to terminate the GFCA, however, we must determine the most appropriate date on which to do so.

SDG&E proposed ending the gas margin component of the GFCA on January 1, 1999, and establishing another account for the remaining portions of the GFCA. ORA agreed that the GFCA should be eliminated, but proposed ending the GFCA on April 30, 1999. ORA's position is that the GFCA should be terminated as of whatever month the GFCA began operation to more accurately account for seasonal adjustments. It was later determined during hearings that the GFCA was initially established in May 1988, but that it may have been implemented to close out several other accounts, and there may have been a change in the way the account was calculated in August 1991.

SDG&E opposed during hearings an April 30th termination date simply to avoid "customer confusion" about an additional rate change. SDG&E stated that "… if you look at the way balancing accounts are set up, it doesn't really matter when you terminate the balancing account." (Trans. pg. 247.) However, in its Reply Brief, SDG&E stated that an April 30th termination date would "…harm SDG&E because a revenue shortfall would occur during the first quarter of 1999." (SDG&E Reply Brief, pg. 16.) Later, in its Comments on the Alternate Proposed Decision of Commissioner Bilas, dated March 11, 1999, SDG&E stated that it would not be able to collect its authorized gas revenue requirement in 1999 if the GFCA was eliminated on April 30, 1999. SDG&E stated that it would under-recover its 1999 gas authorized margin by $30 million. SDG&E's forecast of its under-recovery, and its concerns regarding the 1999 calendar year shortfall were not made on the record as written or oral testimony.

The main purpose of the GFCA is to allow SDG&E to recover its authorized gas margin while balancing out the effect of actual gas sales compared to forecasted sales. The account itself balances primarily gas margin with actual revenues. As shown by Exhibit 16, the account is generally undercollected from the spring through late fall, and then overcollected in the winter through early spring. Not considering the other components of the GFCA, if the account balance is near zero, then SDG&E will have recovered its authorized gas margin through that point in time. The amortization of the GFCA balance also impacts the amount of the balance at any point in time.

It is difficult to determine from the record evidence of this case the exact starting date for the GFCA since the GFCA was not an entirely new account when it was established in May 1988. Our D.87-12-039 ordered that the GFCA be established, partly in accordance with a settlement filed in I.86-06-005. The GFCA balance was a consolidation of previously existing accounts, the Consolidated Adjustment Mechanism (CAM) and the Supply Adjustment Mechanism (SAM). SDG&E has stated in its Reply Brief and in its Comments on the Alternate Decision that the SAM was established in August 1978. In addition, it appears that the types of costs which have been included in the GFCA, and the manner in which the balance has been calculated, has changed over the years.

We generally agree with ORA that it is appropriate for SDG&E to go through a full "cycle", but we are not able to determine from the record exactly what that cycle should be. SDG&E voiced its concerns about a forecasted under-recovery of its authorized revenue requirements not in testimony subject to rebuttal, but after hearings were concluded. Its testimony was that it really does not matter when the account is terminated, that the GFCA may have been a consolidation of other accounts, and that changes to the method of calculation were made in August 1991. Based on the record in this proceeding, we find that

the most appropriate resolution of this matter is to simply end the GFCA as the balance next approaches zero. This would allow SDG&E to fully recover its authorized gas margin under the GFCA, while allowing for the impact of actual gas sales compared to forecasted sales. SDG&E should file an advice letter the month before it forecasts the balance will next approach zero, but no later than November 1, 1999. The advice letter should include the termination of the GFCA and an amortization methodology for any remaining balance.

SDG&E explained in its testimony (Exhibit 14, p. 14-5) that the GFCA reflects the recovery of the base cost revenue amounts and other charges related to the transportation and delivery of gas. These "other" charges represent the carrying cost of storage inventory, the recorded transportation charges billed to SDG&E by SoCalGas, and amounts collected for the recovery of franchise fees and uncollectibles. SDG&E proposed that the only GFCA component which should be discontinued is the base cost balancing component, while the "other" costs and revenues should continue to be recorded in a new account. This proposal was unopposed, and we will adopt it.

Using the rate indexing methodology, rates will be determined as follows. The "starting point" for electric distribution and gas rates will be the 1999 authorized rates as determined in the Cost of Service portion of this proceeding in D.98-12-038. In subsequent years, through 2002, electric distribution and gas rates will be determined by multiplying the "update rule" formula, i.e. 1 + inflation - productivity, by the previous year's rates. This formula will be applied to each electric distribution and gas transportation rate and rate component, as described in Exhibit 82, pg. PBR13A-2. Consistent with our policy to use the most recent sales forecast, SDG&E shall file an advice letter after the new sales forecast is adopted in A.98-01-031, SDG&E's Biennial Cost Allocation Proceeding (BCAP) to update the gas sales forecast in the PBR.

We are not adopting SDG&E's proposal for a "permanent" rate adjustment if a revenue sharing adjustment is needed. If a revenue sharing adjustment results from SDG&E's previous year's performance under the PBR, this will be made as a "one-time" adjustment to the rates calculated using the update rule. SDG&E shall file an advice letter by October 1 of each year to implement the rate adjustment.

Productivity

SDG&E proposes productivity factors of 0.92% for electric and 0.68% for gas. SDG&E's proposed productivity factors are based on a study by Christensen Associates. The Christensen study is largely based on companies under traditional regulation. However, one of the chief objectives of PBR regulation is to simulate competition. The premise of incentive regulation is that competitive companies are more efficient and productive.

SDG&E does not propose a stretch factor, asserting that this is no longer appropriate for its proposal. SDG&E appears to implicitly assume that as long as SDG&E performs mildly better than the historical average productivity, 100% of the gain should accrue to shareholders, with no benefit to ratepayers. In the SoCalGas PBR, an additional stretch factor was adopted due to SoCalGas' declining rate base. SDG&E recommends that no productivity adder is necessary to account for declining rate base. We agree that while total rate base is declining due to decreases in generation rate base, SDG&E's rate base in electric distribution and gas department rate base is not declining, and is actually increasing.

Both ORA and UCAN agree to the base historical productivity figures, but propose that stretch factors also be applied.. (See, e.g., Exhibit 24, p. 2-1.) ORA is the only other party that presented testimony specifically on the Christensen study. While ORA recognizes that SDG&E's approach of basing the X factor on

industry-wide estimates of TFP growth is consistent with past Commission decisions, ORA also found merit in the NERA study. For the purpose of establishing an appropriate productivity benchmark, we agree with ORA that it is reasonable to consider the Christensen results as the lower bound in the range of productivity, which supports the addition of a productivity stretch factor (Exhibit 24, p. 2-15).

UCAN also argues that SDG&E's proposal for a rate indexing mechanism is inconsistent with the Christensen study's productivity estimates. UCAN notes that the output measures in the study are heavily weighted to the number of customers served. We are not convinced by UCAN's arguments. The productivity estimates are independent of what type of PBR is authorized. The SDG&E productivity estimates are reasonable on their merits.

FEA recommends a total productivity factor similar to that adopted for Edison. This productivity factor was based on Edison's historical productivity factors of 0.9% for nongeneration plus a small stretch factor. In D.96-09-092, we adopted a total productivity factor of 1.2% for 1997, which then increased to 1.4% in 1998, and 1.6% thereafter. The stretch factor averages about 0.5%. We stated a precise forecast of productivity was unnecessary, because the progressive revenue sharing would allow ratepayers to keep more of the achievable productivity gain. We note that the Edison historical factor is quite close to the 0.92% productivity factor which Christensen Associates calculated for SDG&E's electric department. While SDG&E emphasizes that the Edison productivity factor was adopted because of the absence of an "industry-wide" study, this was only one of several considerations we made in determining the appropriate productivity factor for Edison.

SDG&E asserts that the consumer price index (CPI) adopted for Edison is likely higher than the inflation factor proposed here, so one should not strictly

make a direct comparison to Edison's productivity factor. But as the City of San Diego reminds us, the inflation factor will be reviewed again for Edison in its midterm review. Further, we assume that the inflation factor presented by SDG&E, which was unopposed, is reasonably accurate. Therefore, its relation to the Edison inflation factor should not be a consideration in determining the productivity factor.

SDG&E's O&M productivity growth rate under its current PBR was a modified 1.5% and SDG&E easily exceeded its authorized rate of return. Based on evidence from recent years, we do not expect SDG&E's productivity to decrease significantly. We agree with ORA that it is not reasonable to adopt an average productivity target, which would allow SDG&E to rest on its laurels in terms of achieving productivity gains. (ORA reply brief, p. 12.)

SDG&E argues that if consistency with SoCalGas is desired, the implied stretch factor should be no more than 0.7%. SDG&E refers to ORA's testimony in A.97-12-020, Pacific Gas and Electric's (PG&E) general rate case (GRC) proceeding, in which ORA characterizes SDG&E as being at the "efficiency frontier." When taken in context, however, this is a technical term used by the ORA consultant on productivity benchmarking in the PG&E GRC for efficient utilities.[11] SDG&E also argues that the results of the PBR experiment, which showed returns well into the sharing range, have been taken into account in the cost of service agreement. Further, SDG&E argues that since it has been

[11] In A.97-12-020, ORA's consultant indicates that transmission and distribution (T&D) utilities are more efficient than a general vertically integrated utility in their T&D operations. As a utility sheds its generation function, and concentrates on its T&D function, it can be expected that the utility would become more efficient in its T&D operations. (ETI testimony by R. Silkman at pp. 32-33.)

operating under a PBR for several years, the incentives of a continuing PBR do not present the same opportunity for stretch productivity as there would be when first embarking upon a PBR (as compared to cost of service regulation). On the other hand, we believe that a PBR system provides utilities with continuing incentives to find more and better productivity opportunities.

On the whole, a productivity factor that includes a stretch factor of 0.4% to 0.7% (for an average of 0.55%) is appropriate, reasonably consistent with the productivity factors adopted for SoCalGas, and fair in view of all the evidence. As we stated in D.97-05-054:

> "It is appropriate to 'set the bar high' in the expectation that SoCal will, indeed, stretch to maximize productivity. Were we to set too low a goal, SoCal's benefit could come at the expense of the ratepayers, even allowing for a sharing mechanism. There would be no advantage to adopting such a PBR over traditional ratemaking methodology. Nevertheless, we recognize that productivity improvements are not likely to occur all at once." (D.97-07-054, mimeo. at p. 29.)

It is reasonable to ramp up the stretch factor incrementally over the term of the PBR, which recognizes both that productivity improvement will not occur all at once and that SDG&E's escalation factor is lower than the CPI. We will adopt a stretch factor that increases over the term of the PBR mechanism, resulting in an X factor on the electric side of 1.32% in 2000, 1.47% in 2001, and 1.62% in 2002. On the gas side, we adopt an X factor of 1.08% in 2000, 1.23% in 2001, and 1.38% in 2002.

Earnings Sharing Mechanism

We reject SDG&E's proposed earnings sharing approach. The calibration method could lead to potentially unintended consequences. We reject SDG&E's proposal for several reasons. SDG&E's proposed revenue sharing (or earnings sharing) deadband (100 basis points above and below the authorized ROR) is too

wide and the percentage of revenue sharing by ratepayers (a fixed 20% outside the deadband) is too low. There are certain perverse incentives inherent in SDG&E's proposal. SDG&E may have a disincentive beyond a certain point to continue lowering costs if it knows that rates will go down on a permanent basis, since rate reductions will make it more difficult to achieve favorable rates of returns. Even SDG&E concedes that this problem exists and recommends that the Commission allow a lower ratepayer share to avoid this disincentive. (SDG&E's brief, pp. 5-6.)

SDG&E's proposed revenue sharing (or earnings sharing) deadband (100 basis points above and below the authorized ROR) is too wide and the percentage of revenue sharing by ratepayers (a fixed 20% outside the deadband) is too low. The deadband is approximately four times that adopted for Edison (Exhibit 17, p. 8.) or SoCalGas. Gains or losses would have to be relatively large before being shared with customers. (Exhibit 17, p. 9.) As UCAN points out, very little sharing of revenues above the benchmark has occurred under SDG&E's current PBR, due to the 100 basis point deadband and the low percentage of sharing with ratepayers in the first tier. We have made the same finding in Resolution E-3562, issued on December 17, 1998.

The 20% sharing calibration method does not comport with our regulatory goals, because there is not an equitable sharing of benefits. As FEA points out, under the calibration method, decreases in rates one year would have a negative impact on net operating income the following year. This effect could lead to a lowered incentive to continue to reduce costs, which is contrary to a primary goal of PBR regulation.

The 100 basis point deadband is intended to account for the gains and losses associated with routine operations, including sales and throughput fluctuations. (Exhibit 19.) We prefer to implement a narrow deadband and to

eliminate the GFCA as discussed above. We adopt a progressive sharing mechanism, similar to the progressive sharing mechanism that is established for SoCalGas. PU Code § 728 imposes a duty upon us to ensure that utility rates are maintained at a level that is just and reasonable. Under incentive regulation, profits and thus rates, must be maintained at reasonable levels. In D.97-07-054 we explained:

> "A sharing mechanism is the ultimate 'safety net' for ratepayers, as it corrects for the possible adoption of a productivity factor that turns out to be overly conservative, understating the productivity increases which the utility is actually able to achieve. With a sharing mechanism, if the utility attains productivity increases that exceed the adopted productivity factors the resultant profits must be shared with the ratepayers rather than going solely to the utility. … If the utility is actually able to reap benefits above the level reflected by the adopted productivity factor, it would not be 'just and reasonable' to require ratepayers to be satisfied with only the share of savings based upon attaining the productivity estimate made at the outset of the program." (D.97-07-054, mimeo. at p. 24.)

The progressive sharing mechanism protects ratepayers in the event that the adopted productivity factors are low, provides a mechanism to encourage SDG&E to stretch for higher levels of cost savings and revenues, and provides the proper incentives by allowing shareholders to retain progressively greater amounts of its earnings. The easy cost savings provide relatively small shareholder benefit, and the progressive tiers would provide a strong incentive for the utility to strive for more difficult savings. (Exhibit 32, pp. 37-38.)

Exhibits 100 and 101 compared the revenue sharing proposals under several scenarios, using the parameters established by the SDG&E proposed mechanism, the SoCalGas mechanism, and the Edison mechanism. While complex, these comparisons demonstrate that a mechanism modeled after the PBR mechanism adopted for SoCalGas is superior to both the Edison mechanism

and the SDG&E proposal. Ratepayers receive much smaller shares and are exposed to downside risk under the SDG&E proposal, compared to the SoCalGas mechanism, while shareholders stand to gain huge benefits under the SDG&E proposal.

ORA suggests that SDG&E's sharable earnings go to reducing transition costs in order to allow ratepayers to share in the "windfall" associated with certain sales increases. However, the Commission rejected this idea previously. Further, SDG&E expects transition costs to end this year (and ORA's method would adjust for more than just sales windfall). We prefer instead to adjust the sharing mechanism to allow ratepayers to capture more of the earnings that would likely come from exogenous sales increases. We will widen the first sharing band from 25 basis points to 50 basis points, where ratepayers receive a higher percentage of sharing. The resulting sharing mechanism would be as follows:

0 - 25 bp -- deadband: 100% shareholders
25-75 bp – 75% ratepayers/25% shareholders
75-100 bp – 65% ratepayers, 35% shareholders
100-125 bp – 55% ratepayers, 45% shareholders
125-150 bp – 45% ratepayers, 35% shareholders
150-175 bp – 35% ratepayers, 65% shareholders
175-200 bp – 25% ratepayers, 75% shareholders
200-250 bp – 15% ratepayers, 85% shareholders
250-300 bp -- 5% ratepayers, 95% shareholders

Therefore, we adopt a progressive sharing mechanism with a deadband of 25 basis points above the benchmark rate of return. Shareholders shall receive 100% of earnings up to the level of 25 basis points above the benchmark rate of return and an increasing percentage in steps from 25 up to 300 basis points,

above which level shareholders will also receive 100% of the earnings. Similar to our approach in SDG&E's prior base rate PBR mechanism, and as acknowledged by parties in the performance indicator settlement, the calculation of rewards and penalties and the earnings sharing mechanism will be based on a full year for 1999.

Like the mechanism adopted for SoCalGas, we will adopt eight bands between 25 basis points above the benchmark rate of return and 300 basis points above the benchmark rate of return. The first band shall be from 25 to 75 basis points above the benchmark. Shareholders shall receive 25% of the marginal revenues in this band and ratepayers shall receive 75% of the marginal revenues. Each of the next five successive bands shall be 25 basis points wide and increase the incremental share allocated to shareholders by 10% and decrease the incremental share allocated to ratepayers by 10%. The sixth band shall fall between 175 and 200 basis points above the benchmark, with shareholders receiving 75% and ratepayers 25%. The seventh band shall be between 200 and 250 basis points above the benchmark, with shareholders receiving 85% and ratepayers 15%. The eighth band shall be between 250 and 300 basis points above the benchmark, with shareholders receiving 95% and ratepayers 5%. These bands result in sharing amounts that change in step functions, rather than in a linear fashion, as was adopted for Edison.

This progressive sharing mechanism creates a "win-win" for both shareholders and ratepayers. For earnings above 300 basis points above the benchmark, there is unlimited upside potential for SDG&E. As we determined in D.97-07-054:

> "Under this system, shareholders may gain up to 68% of the increment up to 300 basis points above the benchmark. However, as shareholder may keep all of the increment above 300 basis points above the benchmark…, it is possible for shareholders to gain

> significantly more than 68% of the increment. For example, if returns are 400 basis points above the benchmark, shareholders would retain 76% of the increment. This system given an excellent and increasing incentive to shareholders, and is fair to ratepayers who receive both the 'consumer dividend' in the productivity formula and a larger share of early (and presumably easier) productivity gains." (D.97-07-054, mimeo. at p. 40.)

Z-Factor Treatment

We will adopt Z-factor treatment only for those costs successfully meeting the nine criteria previously adopted for Edison and SoCalGas. In D.96-09-092, we determined that unexpected events which meet the following criteria would be recoverable as an adjustment to the annual update rule:

1. The event causing the cost must be exogenous to the utility.
2. The event must occur after implementation of the PBR.
3. The utility cannot control the cost.
4. The costs are not a normal cost of doing business.
5. The event affects the utility disproportionately.
6. The PBR update rule must not implicitly include the cost.
7. The cost must have a major impact on the utility.
8. The cost impact must be measurable.
9. The utility must incur the cost reasonably.

We need not consider reopening the PBR structure in the event that significant changes are made to the responsibility of the utility for providing services or equipment at this time, as UCAN suggests, but we can certainly consider such impacts at the comprehensive review, as discussed below.

When a potential Z-factor event occurs, SDG&E must promptly advise us of its occurrence by advice letter and establish a memorandum account for the event. The notification shall provide all relevant information, including a

description, amount involved, timing, and how the event conforms to the nine adopted criteria. We will review all such events in the comprehensive review.

For each event, SDG&E's shareholders will absorb the first $5 million per event of otherwise compensable Z-factor adjustments. This deductible is separately applied to each Z-factor event. The $5 million deductible should be a one-time deductible per Z-factor event, even if the costs associated with the event are incurred in more than one year.

We will adopt both the 150-basis point voluntary offramp and the 300-basis-point mandatory offramp for earnings below the authorized rate of return. This approach will ensure that there is a mechanism to protect both ratepayers and shareholders from significant deviations in anticipated earnings. In addition, this approach provides increasing incentives to SDG&E because it retains 100% of earnings for increments above 300 basis points above the benchmark. Therefore, SDG&E or ORA may file a motion for voluntary suspension if SDG&E reports net operating income that is at least 150 basis points below its authorized rate of return. If SDG&E reports net operating income indicating a return of 300 or more basis points below its authorized rate of return, the PBR mechanism will be automatically suspended, and we will require SDG&E to file an application which will lead to a formal review of the mechanism.

We adopt the exclusions recommended by the cost of service settlement. Pursuant to D.98-12-038, certain costs will not be included in the PBR mechanism, but are subject to other forms of ratemaking. Tree-trimming expenses are not included in the PBR sharing mechanism, but are subject to a one-way balancing account. As described in D.98-12-038, if SDG&E achieves and documents a 50% reduction in tree-trimming expenses from its 1999 budget, SDG&E may request termination of this balancing account treatment. For the duration of the PBR period, revenues and incurred expenses for tree trimming will be excluded from

the indexing mechanism and from recorded base rate revenue expenses before SDG&E calculates its actual earned rate of return for revenue sharing purposes. Costs attributable to senior executive retirement plans or executive bonuses are also excluded from the indexing mechanism and from earnings sharing during the PBR period. The costs for the NGV program will be excluded from the year 2000 update rule because they are recovered under the NGV balancing account, which is expected to be eliminated at the end of 2000. Future costs related to the CEMA and the Gas Hazardous Substance Cost Recovery Account will be recovered through those respective balancing accounts, not through the PBR. The cost of service settlement also provides that there is not ratepayer contribution to pension expenses.

We agree with SDG&E that exclusions should be kept to a minimum. UCAN recommends that the DSM and research, development and demonstration (RD&D) one-way balancing accounts should be excluded from the PBR. SDG&E states that such one-way balancing accounts are subject to a separate ratemaking treatment and therefore should not be included in the PBR calculation. In effect, these accounts are excluded from the PBR. UCAN also argues that payments made if utility employees are transferred to affiliates should be excluded from the PBR. This appears to be settled in the cost of service settlement, which provides that affiliate payments for such purposes are refunded to ratepayers through the PBR as an offset to any reward SDG&E earns or as an adder to any penalty SDG&E pays. The cost of service settlement also provides that SDG&E may recover $10.2 million for generation-related franchise fees. If a different recovery mechanism for such fees is authorized in the future, the amount included in electric generation will be adjusted accordingly.

Direct access implementation costs are being addressed in A.98-05-006. The cost of service settlement provides that if SDG&E is not allowed to recover

such costs as § 376 costs, SDG&E will record these costs in a new memorandum account and seek recovery through a separate application. UCAN also argues that known and measurable nonrecurring expenses, such as hazardous waste expenses and Year 2000 computer expenses should be excluded from the PBR. The cost of service settlement addresses both issues. Hazardous waste expenses are referred to the Hazardous Waste collaborative. Year 2000 computer expenses are settled at $1.2 million and are not escalated.

In D.92-12-015, we ordered annual adjustments to Z-factor recovery for PBOP costs for telephone utilities under the New Regulatory Framework (NRF). The cost of service settlement identified $1.43 million in PBOP overcollections to be refunded for the years 1993-1997. ORA recommends that SDG&E submit annual requests for PBOP recovery under the Z factor, rather than including PBOP costs within the PBR mechanism itself. SDG&E contends that PBOP costs, just like any other one-time, discrete event, must adhere to the Z-factor criteria. SDG&E asserts that the cost of service settlement resolves the PBOP overcollection issue. Even if it were still an issue, this overcollection would not qualify because it does not meet the $5 million Z-factor deductible.

No Z-factor treatment was adopted for PBOPs in SoCalGas' PBR mechanism. It appears that Z-factor treatment applies to the change due to accounting differences, which was a transition from cash-basis to accrual accounting, as confirmed in D.97-04-043, mimeo. at p. 23. We will not adopt Z-factor treatment for PBOP recovery.

Monitoring and Evaluation and Comprehensive Review

While SDG&E believes that its current PBR mechanism was effective, ORA, UCAN and other parties strongly disagree with this conclusion. We wish to establish clear objectives related to monitoring and evaluation, building on SDG&E's and UCAN's stipulation. We adopt the reporting requirements

proposed by SDG&E and UCAN. By February 15 of each year, SDG&E will file an annual electric distribution report that addresses the performance indicators and earnings sharing results for the previous calendar year. This report will be filed by advice letter with the Commission's Energy Division. Within 45 days after the end of each calendar quarter, SDG&E will submit quarterly reports to the Energy Division and interested parties that address the 12-months-to-date sharing and year-to-date performance indicator results

D.98-12-038 adopted a settlement agreement regarding cost of service issues that included an agreement that the agreed-upon levels of revenues, sales, expenses, and rate base would be in effect for the years 1999 through 2002, subject to any adjustments made by the Commission. We adopt this same time period for the PBR mechanism. We note that SoCalGas' PBR also expires at the end of 2002. SDG&E is required to file a cost of service study for the year 2003 no later than December 21, 2001, which will trigger a cost of service review in 2002.

SDG&E and UCAN believe that a cost of service review in 2002 precludes the necessity for a mid-term review. We agree. However, we wish to proceed with developing thoughtful monitoring and evaluation criteria. D.97-07-054 called for a comprehensive evaluation of SoCalGas' PBR mechanism because of the merger application, among other factors. The merger of Enova Corporation and Pacific Enterprises is complete, but we have not yet fully explored the ramifications of combining these two utilities. In addition, the rate freeze for electric service should be nearing an end by the end of 2001 and competition in generation may become more prevalent. We will assess these issues in the comprehensive review of SDG&E's PBR mechanism so that we might better understand the effect of incentives in the changing regulatory environment. In addition, D.96-11-021 requires that the utilities develop performance indicators related to maintenance, repair, and replacement of major electric distribution

facilities. In the Performance Indicator Settlement agreement, parties have agreed that SDG&E will gather data for the purposes of developing an electric system maintenance performance indicator. The comprehensive review provides an appropriate forum for SDG&E to present the data collected and to begin the process of discussing appropriate performance indicators related to maintenance, repair, and replacement.

SDG&E and UCAN agree that the PBR mechanism performance over the 1999-2001 time frame should be timely reviewed so that this analysis can be factored into the 2002 cost of service proceeding. We will adopt this recommendation, but will accelerate the process. In order to adhere to the requirements imposed on the Commission by Senate Bill 960, SDG&E shall file an application to develop evaluation criteria for the formal comprehensive review by June 30,2000. The evaluation process shall begin in mid-2000 with workshops facilitated by the Energy Division. The goals of this workshop are to develop appropriate evaluative criteria that can be expressed in measurable terms for the comprehensive review. This workshop should result in a workshop report to be filed with the Commission by year-end 2000. This approach will allow the Commission time to assess and adopt the recommended criteria for evaluating SDG&E's PBR mechanism.

We prefer that the Energy Division conduct the comprehensive review of the PBR mechanism. If a consultant is hired to conduct an independent evaluation, the Energy Division must be in charge of the RFP and the selection process, and it must administer the contract. We often order the utilities to pay for such reviews (see, e.g., D.96-09-032) with these costs later recovered from ratepayers. It is reasonable that the cost of an independent consultant be capped at $400,000 and shared equally between the ratepayers and shareholders, as SDG&E and UCAN suggest. SDG&E will be able to submit its own evaluative

report at the same time other parties or the independent consultant submit their reports.

We agree with the goals and objectives articulated by SDG&E and UCAN, and will look to the workshops to further define these goals. Monitoring and evaluative criteria must be developed so that each goal and objective can be measured. Only then will we have a true picture of the effectiveness of incentive regulation. Therefore, evaluation of the distribution PBR mechanism should be based on considering whether the adopted mechanism achieves the following goals:

- Improve SDG&E's efficiency and performance;
- Provide adequate incentives and remove disincentives to reduce costs and operate efficiently;
- Demonstrate simplified and streamlined regulatory oversight for the Commission and SDG&E;
- Provide a stable and predictable regulatory environment;
- Provide a reasonable opportunity for the utility to earn a fair rate of return;
- Allow management to focus primarily on costs and markets rather than on regulatory proceedings;
- Align interests of shareholders and customers;
- Maintain and improve quality of service; and
- Achieve other regulatory goals.

In order to evaluate whether these goals have been achieved, these parties recommend that the following questions be asked and examined. We ask the Energy Division to explore these questions in workshops and to work with parties to develop measurable forms to answer these questions:

Is SDG&E reducing costs and operating efficiently?

Are risks and rewards fairly balanced for SDG&E?

Are the interests of shareholders and customers aligned?

Is quality of service and employee safety maintained or improved by specific performance indicators?

Are competitive services included in the PBR? What are the links between cost-of-service, competitive services, and monopoly services?

Is the PBR effective given the rate freeze and its later termination?

How should we evaluate the structure of the PBR mechanism and its applicability as the market structure changes?

Does the PBR mechanism remain appropriate for the monopoly utility given that competitive markets exist to provide the same services that are targeted?

Does the PBR mechanism result in utility actions that are inconsistent with the PBR goals? How can such unintended consequences be addressed?

What reporting requirements would improve future evaluation efforts?

Are there other goals that should be considered in assessing PBR performance?

No later than December 21, 2001, SDG&E shall file an application with its cost of service study for 2003. This application will trigger the formal comprehensive review of the distribution PBR mechanism. SDG&E should consider the goals and evaluative criteria established at Energy Division workshops in filing this application, as well as the criteria delineated in D.97-07-054. In this way we can ensure that SDG&E's distribution PBR mechanism is meeting our intended goals and furthering our regulatory policy.

Comments on Alternate Decision

Comments on the Alternate Decision were filed by SDG&E, UCAN, NRDC, and ORA. Based on SDG&E's comments, we have adjusted the ramp up of the stretch factor to apply over three years instead of four because the update rule only applies in years 2000, 2001, and 2002. We have also revised the termination date of the GFCA and incorporated other minor clarifications and corrections throughout the order.

Findings of Fact

1. We have long considered incentive-based ratemaking superior to command-and-control regulation and have established several goals to be addressed by incentive regulation for energy utilities.

2. Performance-based regulation can provide stronger incentives for efficient utility operations and investment, lower rates, and result in more reasonable, competitive prices for California's consumers.

3. Performance-based regulation can simplify regulation and reduce administrative burdens in the long term, without sacrificing service, safety, and reliability.

4. Incentive regulation can prepare utilities to operate effectively in the increasingly competitive energy utility industry.

5. Incentive regulation should provide a reasonable balancing of risks and rewards, with an equitable sharing of the benefits that reform is intended to achieve.

6. The adopted regulatory program should maintain or improve quality of service, reliability, safety, and customer satisfaction despite expected cost reductions, and should avoid or minimize unintended consequences in interplay among various regulatory programs.

7. SDG&E has been operating under a base rate PBR mechanism since 1994.

8. As approved in D.98-03-073, SoCalGas and SDG&E are now operating entities within the holding company of Sempra Energy, Inc.

9. Once a starting point is selected, PBR mechanisms adjust revenue requirements or rates annually to account for inflation and productivity.

10. Adopting an effective PBR mechanism requires a balance between providing appropriate incentives to utilities with adhering to our stated goals of providing an equitable sharing of the benefits.

11. Performance indicators are designed to ensure that the utility's service quality, customer service, reliability, and safety do not deteriorate under PBR regulation.

12. Under its base rate PBR mechanism, SDG&E earned approximately $136 million in after-tax dollars from its earnings sharing mechanism during the period 1994 through 1997.

13. Ratepayers' share of earnings is expected to total approximately $11.2 million during the period 1994 through 1997.

14. SDG&E, ORA, UCAN, FEA, CCUE, the City of San Diego, Farm Bureau, and NRDC filed a joint motion seeking Commission approval of a settlement resolving performance indicators addressing safety, reliability, customer satisfaction, and call center responsiveness, as well as certain customer service guarantees cost of service issues in this proceeding.

15. There is no known opposition to approving the settlement, and no need to hold a hearing on these issues.

16. The settlement satisfies the Commission criteria for an all-party settlement, as set forth in our Rules of Practice and Procedure and D.92-12-019.

17. No party disputes SDG&E's proposed escalation measure, which is based on historical and forecasted industry-specific data, published quarterly. Separate escalation factors are used for electric and gas. Each index is designed to

measure changes in price levels of labor, nonlabor and capital inputs purchased by California utilities.

18. Cost of capital will continue to be addressed in cost of capital proceedings and through the MICAM mechanism.

19. Adopting a PBR mechanism modeled after that adopted for SoCalGas in D.97-07-054 and Edison in D.96-09-092 allows both the shareholders and the customers to benefit.

20. The revenue requirement used as the starting point for SDG&E's PBR mechanism is $563.4 million for electric distribution and $201.5 million for gas base rate revenues, as approved in D.98-12-038.

21. The term of the adopted PBR should be 1999 through 2002, with provisions for a comprehensive review.

22. SDG&E must file a 2003 cost of service study no later than December 21, 2001.

23. UCAN's proposal to implement separate PBR mechanisms for electric wires, electric metering and billing, gas pipes, and gas metering and billing is premature.

24. NRDC's proposal to establish a performance indicator for distributed generation is premature.

25. Under a rate indexing approach, SDG&E would have a direct interest in increasing electricity usage and gas throughput since its base rate revenues would increase with increases in usage.

26. The revenue-per-customer approach would increase revenue requirements as the number of customers increases but does not allow additional revenue recovery due to sales increases.

27. Adopting the rate indexing formula is simpler, more relevant to SDG&E's circumstances, and more compatible with an emerging competitive market.

28. It is reasonable to eliminate the GFCA with a rate indexing methodology. GFCA components other than base cost balancing component should continue to be recorded in a new account.

29. It is reasonable to terminate the GFCA when balance next approaches zero.

30. An adjustment to the sharing mechanism can counteract the potential windfall effect of sales increases which are likely to occur without effort on SDG&E's part. Environmental concerns arising from an incentive to increase sales are mitigated by other state policies, including targeted energy efficiency and renewable energy programs.

31. A Total Factor Productivity (TFP) index measures the ratio of its output quantity index to its input quantity index and compares the growth trend in the unit cost of the industry to the trend in prices of labor, capital services, and other production inputs.

32. SDG&E asserts that no stretch factor is necessary, despite the fact that its proposed productivity factors are less than those adopted for other energy utilities.

33. The premise of incentive regulation is that competitive companies are more efficient and productive.

34. It is important to apply a stretch factor to the productivity factor to ensure that the utility to which it is applied is "stretching" to achieve efficiency gains.

35. Edison's historical productivity factor of 0.9% is close to the productivity factor of 0.92% calculated by Christensen Associates for SDG&E.

36. SDG&E's O&M productivity growth under its current PBR mechanism was a modified 1.5% and SDG&E easily exceeded its authorized rate of return.

37. It is reasonable to ramp up the stretch factor incrementally over the term of the PBR, which recognizes both that productivity improvements will not occur all at once and that SDG&E's escalation factor is lower than the CPI.

38. Certain perverse incentives are inherent in SDG&E's rate calibration proposal, because SDG&E may have a disincentive to continue lower costs, knowing that rates will decrease on a permanent basis, since rate reductions will make it more difficult to achieve a favorable rate of return.

39. SDG&E's proposed deadband is approximately four times that adopted for Edison or SoCalGas; therefore, gains or losses would have to be relatively large before being shared with customers.

40. Relatively few of SDG&E's earnings have been shared with ratepayers under SDG&E's current PBR mechanism, due to the 100 basis point deadband and the low 25% sharing with ratepayers in the first tier.

41. Under the calibration method, decreases in rates one year would have a negative impact on net operating income the following year, which could lead to a lowered incentive to continue to reduce costs, contrary to a primary goal of PBR regulation.

42. The 20% sharing calibration method and 100 basis point deadband does not comport with our regulatory goals, because there is not an equitable sharing of benefits.

43. SDG&E's proposed 100 basis point deadband is intended to account for gains and losses associated with routine operations, including sales and throughput fluctuations.

44. SDG&E acknowledges that its proposed deadband is wider than than adopted for either Edison or SoCalGas.

45. The progressive sharing mechanism creates a "win-win" for both shareholders and ratepayers, because SDG&E has unlimited upside potential to retain earnings above 300 basis points above the benchmark.

46. A progressive sharing mechanism protects ratepayers because it corrects for the potential of adopting a productivity factor that turns out to be too low and allows equitable sharing of benefits of SDG&E's cost reduction efforts.

47. A progressive sharing mechanism provides the proper incentives by allowing shareholders to retain progressively greater amounts of its earnings as higher rates of return are achieved.

48. The cost of service settlement identified $1.43 million in PBOP overcollections to be refunded for the years 1993-1997.

49. The GFCA should be eliminated to eliminate balancing account treatment for sales volatility.

50. Adopting a 150-basis point voluntary offramp and a 300-basis point mandatory offramp for earnings below the authorized rate of return ensures that there is a mechanism to protect ratepayers and shareholders from significant deviations in earnings.

51. The adopted PBR mechanism provides increasing incentives to SDG&E, because SDG&E retains 100% of earnings for increments above 300 basis points above the benchmark.

52. Monitoring and evaluation are particularly important in determining whether a PBR mechanism is effective, i.e., is providing the desired incentives and results.

53. Monitoring and evaluative criteria must be developed so that each goal and objective can be measured.

54. The comprehensive review provides an appropriate forum for SDG&E to present the data collected regarding maintenance, repair, and replacement of major electric distribution facilities.

55. The Energy Division should conduct the comprehensive review of the PBR mechanism.

Conclusions of Law

1. In R.94-04-031 and I.94-04-032, we stated our intention to replace cost-of-service regulation with performance-based regulation and directed the utilities to file applications requesting distribution PBR mechanisms.

2. The performance indicator settlement is an "uncontested settlement" as defined in Rule 51(f).

3. The performance indicator settlement is reasonable in light of the whole record, consistent with law, and in the public interest, and should be approved.

4. Adopting SDG&E's proposed distribution PBR mechanism will not serve the public interest nor achieve our broadly stated goals related to PBR regulation.

5. It is reasonable and prudent to base SDG&E's distribution PBR mechanism on the PBR adopted for SoCalGas in D.97-07-054 and the PBR adopted for Edison in D.96-09-092.

6. It is reasonable to adopt SDG&E's proposed escalation methodology, which no party disputed.

7. It is reasonable to review the issue of distinguishing between monopoly and competitive services, and possible cross-subsidies, during the comprehensive review and to develop monitoring and evaluation criteria to track such possibilities.

8. Performance indicators related to distributed generation should be established after we develop a particular approach for distributed generation in R.98-12-013.

9. Adopting a rate index approach may lead to a windfall for SDG&E due to projected sales increase unrelated to management efforts, and there should be an adjustment to the sharing mechanism to account for this.

10. It is reasonable to adopt the base historical productivity figures proposed by SDG&E as a starting point in determining productivity factors.

11. Adopting a productivity factor that includes a stretch factor of 0.4% ramping up to 0.7% is appropriate, reasonably consistent with the productivity factors adopted for SoCalGas and Edison, and provides incentive to SDG&E to stretch beyond average productivity gains.

12. It is reasonable to eliminate the base cost balancing component of the GFCA when the balance next approaches zero. The SDG&E proposal for a new account to record costs and revenues associated with the carrying costs of storage inventory, the recorded transportation charges billed to SDG&E by SoCalGas, and amounts collected for the recovery of franchise fees and uncollectibles was unopposed, is reasonable, and should be adopted.

13. SDG&E should file an advice letter the month before it forecasts the GFCA balance will next approach zero, but no later than November 1, 1999.

14. PU Code § 728 imposes a duty upon us to ensure that utility rates are maintained at a level that is just and reasonable; therefore, under incentive regulation, profits and thus rates must be maintained at reasonable levels.

15. Consistent with our regulatory goals, adopting an aggressive productivity factor and a progressive sharing mechanism ensures that ratepayers will be at least as well off under the PBR as under traditional ratemaking.

16. Z-factor treatment should be applied only to those costs successfully meeting the nine criteria previously adopted in D.96-09-092 and D.97-07-054:

a) The event causing the cost must be exogenous to the utility.

b) The event must occur after implementation of the PBR.

c) The utility cannot control the cost.

d) The costs are not a normal cost of doing business.

e) The event affects the utility disproportionately.

f) The PBR update rule must not implicitly include the cost.

g) The cost must have a major impact on the utility.

h) The cost impact must be measurable.

i) The utility must incur the cost reasonably.

17. It is reasonable to adopt the exclusions recommended by the cost of service settlement approved in D.98-12-038.

18. No Z-factor treatment was adopted for PBOPs in SoCalGas' PBR mechanism and PBOP recovery does not conform to the Z-factor criteria adopted in this decision.

19. It is reasonable to adopt the reporting requirements proposed by SDG&E and UCAN.

20. The term of the PBR mechanism should be 1999 through 2002, consistent with the cost of service settlement adopted in D.98-12-038.

21. Because of the changing regulatory environment, it is reasonable to develop rigorous evaluative criteria, so that we will better understand the effect of incentives.

22. Should Energy Division determine that it is necessary to hire an independent consultant, it is reasonable that the cost be capped at $400,000 and that ratepayers and shareholder share the cost equally.

23. This order should be effective today, so that SDG&E's distribution PBR mechanism can be implemented on a timely basis.

24. This proceeding should be closed.

O R D E R

IT IS ORDERED that:

1. The Joint Motion for Adoption of Settlement Agreement on PBR Performance Indicators in the San Diego Gas & Electric Company (SDG&E) Application (A.) 98-01-014 is granted.

2. The Settlement Agreement is attached to this decision as Appendix B and is adopted as reasonable in light of the whole record, consistent with the law, and in the public interest.

3. SDG&E shall use a rate indexing methodology for its PBR. The "starting point" for electric distribution and gas rates will be the 1999 authorized rates as determined in the Cost of Service portion of this proceeding in D.98-12-038. In subsequent years, through 2002, electric distribution and gas rates will be determined by multiplying the "update rule" formula, i.e. 1 + inflation - productivity, by the previous year's rates. This formula will be applied to each electric distribution and gas transportation rate and rate component, as described in Exhibit 82, pg. PBR13A-2. Adjustments, due to such factors as revenue sharing, or PBR performance rewards or penalties, will be made as one-time adjustments. SDG&E shall file an advice letter by October 1 of each year to implement the rate adjustment. SDG&E shall file an advice letter to terminate the GFCA when the balance next approaches zero. The advice letter should be filed the month before SDG&E forecasts a zero balance, but no later than November 1, 1999.

4. SDG&E shall implement a distribution performance-based ratemaking (PBR) mechanism using the revenue requirements adopted in Decision (D.) 98-12-038 as a starting point. The PBR shall use a rate indexing approach, the adopted escalation methodology (Attachment 1), and a progressive earnings sharing mechanism as described in this decision. SDG&E shall apply a stretch factor that increases over the term of the PBR mechanism, resulting in an X factor on the electric side of 1.32% in 2000, 1.47% in 2001, and 1.62% in 2002. On the gas side, SDG&E shall apply an X factor of 1.08% in 2000, 1.23% in 2001, and 1.38% in 2002.

5. SDG&E shall construct the progressive sharing mechanism with a deadband of 25 basis points above the benchmark rate of return. Shareholders shall receive 100% of earnings up to the level of 25 basis points above the benchmark rate of return and an increasing percentage in steps from 25 to 300 basis points, above which level shareholders will also receive 100% of the earnings.

6. SDG&E shall construct the progressive sharing mechanism with eight bands between 25 basis points above the benchmark rate of return and 300 basis points above the benchmark rate of return. The first band shall be from 25 to 75 basis points above the benchmark. Shareholders shall receive 25% of the marginal revenues in this band and ratepayers shall receive 75% of the marginal revenues. Each of the next five successive band shall increase the incremental share allocated to shareholders by 10% and decrease the incremental share allocated to ratepayers by 10%. The sixth band shall fall between 175 and 200 basis points above the benchmark, with shareholders receiving 75% and ratepayers 25%. The seventh band shall be between 200 and 250 basis points above the benchmark, with shareholders receiving 85% and ratepayers 15%. The eighth band shall be between 250 and 300 basis points above the benchmark, with shareholders receiving 95% and ratepayers 5%.

7. When a potential Z-factor event occurs, SDG&E shall promptly advise us of its occurrence by advice letter and shall establish a memorandum account for the event. The notification shall provide all relevant information, including a description, amount involved, timing, and how the event conforms to the nine adopted criteria. All such events shall be reviewed in the comprehensive review. For each event, SDG&E's shareholders shall absorb the first $5 million per event of otherwise compensable Z-factor adjustments. This deductible shall be separately applied to each Z-factor event. The deductible shall be a one-time

deductible per Z-factor event, even if the costs associated with the event are incurred in more than one year.

8. SDG&E or ORA may file a motion for voluntary suspension if SDG&E reports net operating income that is at least 150 basis points below its authorized rate of return. If SDG&E reports net operating income indicating a return of 300 or more basis points below its authorized rate of return, the PBR mechanism shall be automatically suspended and SDG&E shall file an application which will lead to a formal review of the mechanism.

9. For the duration of the PBR period, the following items, which are included in 1999 authorized revenues, shall be excluded from the indexing mechanism before SDG&E calculates its annual escalation of revenue requirements:

a. Tree-trimming authorized revenues, as described in the settlement adopted in D.98-12-038.

b. Costs associated with the Natural Gas Vehicle (NGV) program, which shall be excluded for the year 2000 update rule only. Beginning in 2001, NGV costs shall be included in the PBR indexing mechanism.

c. Costs associated with gas research, development and demonstration (RD&D), as these are subject to a one-way balancing accounts.

d. Fixed A&G Costs that SDG&E may be able to recover through contracts under which it will provide O&M services to its divested fossil fuel plants, as adopted in D.98-12-038. If SDG&E is able to recover any of these costs through a maintenance contract, it will make a corresponding downward adjustment to the authorized revenue requirement.

e. Year 2000 computer expenses at $1.2 million per year.

f. Rewards for Demand Side Management (DSM) programs.

10. For the duration of the PBR period, the following items shall be excluded from recorded PBR base rate revenues and/or expenses before SDG&E calculates its actual earned rate of return for revenue sharing purposes:

a. Tree-trimming revenues and incurred expenses, as described in the settlement adopted in D.98-12-038.

b. Costs attributable to senior executive retirement plans and executive bonuses.

c. Costs associated with the NGV program for 1999 and 2000. Beginning in 2001, these costs should be included as PBR expense for revenue sharing purposes.

d. Costs associated with gas RD&D, as this is subject to a one-way balancing account.

e. Any under run of the fixed A&G costs associated with the maintenance contract for divested power plants pursuant to the adopted settlement in D.98-12-038.

f. Hazardous waste costs, which are recovered through the Hazardous Waste Collaborative.

g. Future costs related to the Catastrophic Event Memorandum Account and the Gas Hazardous Substance Cost Recovery Account, which are recovered through those respective balancing accounts.

h. DSM and PBR rewards.

11. By February 15 of each year, SDG&E shall file an annual electric distribution report that addresses the performance indicators and earnings sharing results for the previous calendar year. This report shall be filed by advice letter with the Energy Division. Within 45 days after the end of each calendar quarter, SDG&E shall submit quarterly reports to the Energy Division and interested parties that address the 12-month-to-date sharing and year-to-date performance indicator results.

12. SDG&E shall file an application to develop evaluation criteria for the comprehensive review by June 30, 2000. The evaluation process shall begin in mid-1999 with workshops facilitated by the Energy Division. The Energy Division shall file and serve a workshop report by year-end 2000.

13. If a consultant is hired to conduct an independent evaluation, the Energy Division shall develop and issue the Request for Proposal (RFP), administer the selection process, and administer the contract. The cost of an independent consultant shall be shared equally between the ratepayers and shareholders. SDG&E and interested parties may submit evaluative reports at the same time other parties or the independent consultant submit their reports.

14. The Energy Division shall work with other parties to develop measurable evaluation criteria based on the following goals outlined in this decision:

- Improve SDG&E's efficiency and performance;
- Provide adequate incentives and remove disincentives to reduce costs and operate efficiently;
- Demonstrate simplified and streamlined regulatory oversight for the Commission and SDG&E;
- Provide a stable and predictable regulatory environment;
- Provide a reasonable opportunity for the utility to earn a fair rate of return;
- Allow management to focus primarily on costs and markets rather than on regulatory proceedings;
- Align interests of shareholders and customers;
- Maintain and improve quality of service; and
- Achieve other regulatory goals.

15. SDG&E is authorized to implement the distribution performance-based ratemaking mechanism described in this decision. SDG&E shall file a compliance advice letter implementing all required tariff changes necessitated by this decision within 10 days of the effective date of this decision. SDG&E shall include in its advice letter which implements this decision the establishment of a

new account to record costs and revenues for the carrying cost of storage inventory, the recorded transportation charges billed to SDG&E by SoCalGas, and amounts collected for the recovery of franchise fees and uncollectibles.

16. SDG&E shall file an advice letter after the new sales forecast is adopted in A.98-01-031 to update the gas sales forecast in the PBR.

17. SDG&E shall file an application with a comprehensive cost of service study for the year 2003 no later than December 21, 2001, which will trigger a cost of service review in 2002.

18. Application 98-01-014 is closed.

This order is effective today.

Dated May 13, 1999, at San Francisco, California.

RICHARD A. BILAS
President
JOSIAH L. NEEPER
Commissioner

I will file a dissent.

/s/ HENRY M. DUQUE
Commissioner

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ESCALATION

SDG&E's escalation measure is based on historical and forecasted industry-specific data. Separate escalation factors are used for electric and gas. These escalation factors are designed to measure changes in price levels of labor, non-labor and capital inputs purchased by California utilities.

The escalation factors are developed using national-level utility-specific cost indices obtained from the Standard & Poor's DRI/McGraw-Hill Economic and Utility Cost Forecasting Services (DRI). The component national level utility cost indices are combined into electric distribution and gas escalation factors using expenditure weights developed from historical expenditures by electric and gas utilities located in California. The electric utilities are SDG&E, Southern California Edison, and Pacific Gas and Electric Company (PG&E). The gas utilities are SDG&E, Southern California Gas Company, and PG&E.

Labor O&M Cost Index

Average hourly earnings for electric, gas, and sanitary services are used as the basis for the labor cost index for both electric distribution and gas. Referred to as AHE49NS by DRI, historical data for this data series is reported by the United States Bureau of Labor Statistics (BLS). This data is used as the basis for the DRI labor cost index, and forecasts of AHE49NS are available from DRI.

Non-Labor O&M Cost Indices

Separate non-labor cost indices are developed for electric distribution and gas. The index for electric distribution non-labor O&M expenses utilizes five DRI cost indices: total distribution plant O&M cost index (JEDOMMS), customer accounts operation cost index (JECAOMS), customer service and information operation cost index (JECSIIOMS), sales operation cost index (JESALOMS), and total administrative and general O&M cost index (JEADGOMMS).

The index for gas non-labor O&M expenses is the DRI total gas utility non labor O&M cost index (JGTOTALMS).

Capital-Related Cost Indices

The cost index for capital related electric distribution costs is based on an estimate of the rental price of electric distribution utility structures, which is estimated from three data series obtained from DRI: rental price of capital - nonresidential structures-public utilities (ICNRCOSTPU); chain type price index - investment in nonresidential structures - public utilities (PCWICNRPU), and the Handy-Whitman electric utility construction cost index -total distribution plant, Pacific Region (JUEPD@PCF). All of these indices are obtained from DRI. The rental price of capital for electric distribution utility structures (ICNRCOSTPUED) is calculated as follows:

ICNRCOSTPUED = ICNRCOSTPU*(JUEPD@PCF / PCWICNRPU)

The cost index for capital related gas costs is based on an estimate of the rental price of gas utility structures, which is estimated from three data series obtained from DRI: rental price of capital - nonresidential structures-public utilities (ICNRCOSTPU); chain type price index - investment in nonresidential structures - public utilities (PCWICNRPU), and the Handy-

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Whitman gas utility construction cost index -total plant, Pacific Region (JUG@PCF). The rental price of gas utility structures (ICNRCOSTPUG) is calculated as follows:

ICNRCOSTPUG = ICNRCOSTPU*(JUG@PCF/PCWICNRPU)

A three-year moving average of the rental price of utility structures is used to calculate the capital -related cost indices.

Weighting Factors

The escalation factors for electric distribution and gas are each a weighted average of the component cost indices for labor, non-labor, and capital-related expenses. The weights used to construct the weighted average are based on average state-level electric distribution expenditures or gas utility expenditures expressed in real 1996 dollars for the period 1992 - 1996. These weights are shown below:

California State-Level Weights

	Electric	Gas
Labor	0.179216	0.234234
Non-Labor		0.312008
Distribution	0.062799	
Customer Accounts	0.028032	
Customer Service	0.043102	
Sales	0.001225	
Admin. & General	0.109725	
Capital	0.575900	0.453757
Total	1.000000	1.000000

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Annual Escalation Calculation

Starting in the year 2000, the percentage changes in the weighted cost indices will be used in the PBR indexing formulae to adjust the electric distribution and gas base rates for changes in the cost of inputs purchased by the utility. In mid-August 1999, one-year ahead projections of the cost indexes and the percentage changes in these indexes will be estimated. These estimates will be based on the most recent historical and forecast data available from Standard and Poor's DRI/McGraw-Hill Economic and Utility Cost Information Services. In mid-August of every year starting in the year 2000, historical and forecast cost indexes and percentage changes in these indexes will be estimated from the most recent historical and forecast data available from DRI. The historical and forecast percentage changes will be used in the rates indexing formulae to obtain rates for the next year. Both forecast and historical percent changes back to 1999 are required to true-up rates to the most recent and accurate cost escalation estimates available after 1999. The updated historical and forecast percentage changes should capture all revisions in the DRI data used to compute the cost indexes.

(END OF ATTACHMENT 1)

ATTACHMENT 2

EARNINGS SHARING MECHANISM

The earnings sharing mechanism we adopt in this decision is illustrated below:

Shareholder and Ratepayer Percentage Share of Revenues Associated with Rate of Return (ROR) Above Authorized

Shareholders %	Ratepayers %	Basis Points Above Authorized ROR
100	0	Above 300
95	5	250 to 300
85	15	200 to 250
75	25	175 to 200
65	35	150 to 175
55	45	125 to 150
45	55	100 to 125
35	65	75 to 100
25	75	25 to 75
100	0	0 to 25
100	0	ROR below authorized*

*If SDG&E reports an ROR which is 150 basis points or greater below the authorized ROR, SDG&E or ORA may file for voluntary suspension of the PBR mechanism. If SDG&E reports an ROR which is 300 basis points or more below its authorized ROR, the PBR mechanism will be automatically suspended, and SDG&E will be required to file an application which will lead to a formal review of the mechanism.

(END OF ATTACHMENT 2)